20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr  $65 \phantom{00}70\phantom{00}.\phantom{00}75\phantom{00}80$ 

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Āla Val Tyr Tyr Cys 85 90 95

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe \$100\$

Asp Tyr Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 \$120\$

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Asp Ile Val Met 130 \$135\$

Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Val Gly Asp Arg Val Thr 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}$ 

Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Trp Leu Ala Trp Tyr 165 170 175 .

Gln Gln Lys Pro Gly Arg Ala Pro Lys Val Leu Ile Tyr Lys Ala Ser 180 185 190

Thr Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly 195  $\phantom{\bigg|}200\phantom{\bigg|}$ 

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala 210  $\phantom{-}215\phantom{0}$ 

Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp Thr Phe Gly Gln 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Gly Thr Lys Leu Glu Ile Lys Arg

<210> 1720 <211> 249

<212> PRT <213> Homo sapiens

<400> 1720

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Phe
20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Leu 50 55 60

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys \$85\$ 90 95

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Ser 115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln  $_{\rm J}$  135  $_{\rm 140}$ 

Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys 145 150 160

Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr 165 170 175

Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser 180 185 190

Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly

Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala

210 215 7220

Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly 225 230 235 240

Gly Gly Thr Lys Leu Thr Val Leu Gly

<210> 1721

<211> 248

<212> PRT

<213> Homo sapiens

<400> 1721

Glu Val Gln Leu Val Glu Ser Gly Pro Glu Val Lys Lys Pro Gly Thr 1  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr \$20\$

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $_{\rm 35}$  -  $_{\rm 40}$  - 45

Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe  $_{50}$   $_{\cdot}$   $_{60}$ 

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr  $_{65}$   $\phantom{0000}$  70  $\phantom{0000}$  75  $\phantom{0000}$  80

Met Glu Leu Gly Arg Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe  $100 \ \ 110$ 

Asp Tyr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser Ser Glu Leu Thr

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145 150 155 160

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln
165 170 175

Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg 180 185 Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr 195 200 205 -Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225 230 Gly Thr Lys Leu Thr Val Leu Gly 245 <210> 1722 <211> 250 <212> PRT <213> Homo sapiens <400> 1722 Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 5 10 15 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr 30 . 25 20

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 . 95

Ala Arg Val Leu Pro His Tyr Asp Ile Leu Thr Gly Tyr Ser Gln Asn 100 105 110

Trp Phe Asp Pro Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly 115 120 125

Gly	Gly 130	Gly	Ser	Gly	Gly	Gly 135	Gly	Ser	Gly	Gly	Gly 140	Gly	Ser	Ser	Glı
Leu 145	Thr	Gln	Asp	Pro	Ala 150	Val	Ser	Val	Ala	Leu 155	Gly	Gln	Thr	Val	Arg 160
Ile	Thr	Cys	Gln	Gly 165	Asp	Ser	Leu	Arg	Ser 170	Tyr	Tyr	Ala	Ser	Trp 175	Тут
Gln	Gln	Lys	Pro 180	Gly	Gln	Ala	Pro	Val 185	Leu	Val	Ile	Tyr	Gly 190	Lys	Ası
Asn	Arg	Pro 195	Ser	Gly	Ile	Pro	Asp 200	Arg	Phe	Ser		Ser 205	Ser	Ser	Gly
	Thr 210	Ala	Ser	Leu	Thr	Ile 215	Thr	-Gly	Ala	Gln	Ala 220	Glu	Asp	Glu	Ala
Asp 225	Tyr	Tyr	Cys	Asn	Ser 230	Arg	Asp	Ser	Ser	Gly 235	Asn	His	Val	Val	Phe 240
Gly	Gly	Gly	Thr	Lys 245	Leu	Thr	Val	Leu	Gly 250						
<212 <212	<210> 1723 <211> 250 <212> PRT <213> Homo sapiens														
	)> 1: Val		Leu	Gln 5	Gln	Ser	Gly	Ala	Glu 10	Val	Lys	Glu	Pro	Gly 15	Ala
Ser	Val	Lys	Val 20	Ser	Сув	Lys	Ala	Ser 25	Gly	Tyr	Thr	Phe	Thr 30	Gly	Tyr
Tyr	Met	His 35	Trp	Val	Arg	Gln	Ala 40	Pro	Gly	Gln	Gly	Leu 45	Glu	Trp	Met
Gly	Trp 50	Ile	Asn	Pro	Asn	Ser 55	Gly	Gly	Thr	Asn	Tyr 60	Ala	Gln	Lys	Phe
Gln 65	Gly	Arg	Val	Thr	Met 70	Thr	Arg	Asp	Thr	Ser 75	Ile	Ser	Thr	Ala	Ту1 80

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{0.5cm} 90 \hspace{0.5cm} 95$ 

Ala Arg Val Leu Pro His Tyr Asp Ile Leu Thr Gly Tyr Ser Gln Asn
100 105 110

Trp Phe Asp Pro Trp Gly Lys Gly Thr Met Val Thr Val Ser ser Gly 115 \$120\$

Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu 130 \$135\$

Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg 145 \$150\$

Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr
165 170 175

Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn 180 185 190

· Asn Arg Ser Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly
195 200 205

Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala 210 \$215\$

Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe 225 235 240

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly \$245\$

<210> 1724

<211> 249

<212> PRT

<213> Homo sapiens

<400> 1724

Gln Val Asn Leu Arg Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg  $_{\rm 1}$ 

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

40 45 35

Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val 55

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 70

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Asp Gly Tyr Tyr Asp Ile Leu Thr Gly Tyr Ser Tyr Tyr Gly 100 105 110

Met Asp Val Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly 120

Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu 135

Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile 150 155

Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln 165 170

Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn 180 185

Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn 200 .

Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp

Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly 225 230 235

Gly Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1725

<211> 249

<212> PRT

<213> Homo sapiens

<400> 1725
Gln Val Asn Leu Arg Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15

- Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
- Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45
- Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val 50 55 60
- Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  $65 \ \ \, 70 \ \ \, 75 \ \ \, 80$
- Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 . 90 95
- Ala Lys Asp Gly Tyr Tyr Asp Ile Leu Thr Gly Tyr Ser Tyr Tyr Gly 100 105 110
- Met Asp Val Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly . 115 120 125
- Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile 145 150 155 160
- Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln \$165\$ \$170\$ \$175\$
- Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn 180  $$180\,$
- Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn 195 200 205
- Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly

225 230 235 240

Gly Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1726 <211> 247 <212> PRT <213> Homo sapiens

<400> 1726
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Thr Tyr  $20\ _{\odot}\ _{\odot}\ _{\odot}$ 

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $\cdot$  35 40 45

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr  $_{65}$   $_{70}$   $_{1}$   $_{80}$ 

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Val Tyr Tyr Asp Ile Leu Thr Gly Tyr Asn Leu Phe Phe Asp 100 \$105\$

Tyr Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 \$120\$

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr Gln 130 135 140

Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys 145 150 155 160

Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys \$165\$ \$170\$

Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro 180 185 190

Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala

Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr 210 215 220

Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly Gly 225 \$230\$

Thr Lys Leu Thr Val Leu Gly 245

<210> 1727

<211> 248 <212> PRT

<213> Homo sapiens

<400> 1727

Gln Val Gln Leu Val Gln Ala Gly Ala Asp Val Lys Lys Pro Gly Ser 1 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr \$20\$ \$25\$ \$30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$ \$40\$ . \$45\$

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe 100 105 . 110

Asp Tyr Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145 150 Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln 170 175 165 Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Arg Asn Asn Arg 180 185 Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr 195 200 205 Val Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220 Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 235 225 230 Gly Thr Lys Leu Thr Val Leu Gly 245 <210> 1728 <211> 248 <212> PRT <213> Homo sapiens <400> 1728 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Arg Pro Gly Ser 5 1.0 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 40 Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr

70

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe

Asp Tyr Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr 130 135 140

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Tle Thr. 145 \$150\$

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln
165 170 175

Lys Pro Gly Gln Ala Pro Leu Leu Val Val Tyr Ala Lys Asn Lys Arg 180 185 190

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr 195  $$\cdot$$  200 \$ 205

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 225 220

Tyr Cys His Ser Arg Asp Ser Ser Gly Asn His Val Leu Phe Gly Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}$ 

Gly Thr Lys Leu Thr Val Leu Gly

<210> 1729

<211> 247

<212> PRT

<213> Homo sapiens

<400> 1729

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $_{\rm 35}$   $_{\rm 40}$   $_{\rm 45}$ 

Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe

50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Gly Tyr Tyr Asp Ile Leu Thr Gly Tyr Tyr Asp Ala Phe Asp 100 \$100\$

Ile Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr Gln  $130 \,$ 

Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys 145 \$150\$

Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Thr Asn Trp Phe Gln Gln Lys \$165\$

Pro Gly Gln Ala Pro Leu Leu Val Val Tyr Ala Lys Asn Lys Arg Pro 180 185 190

Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala 195  $\phantom{\bigg|}200\phantom{\bigg|}$  205

Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr 210  $\phantom{-}215\phantom{0}$  220

Cys His Ser Arg Asp Ser Ser Gly Asn His Val Leu Phe Gly Gly Gly 225 230 235 240

Thr Lys Leu Thr Val Leu Gly 245

<210> 1730

<211> 249 <212> PRT

<213> Homo sapiens

<400> 1730 Glu Val Gln Leu Val Glu Ser Gly Ala Glu Val Asn Lys Pro Gly Ala 1 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Tyr

- Tyr Ile His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met 35 40 45
- Gly Trp Tle Asn Ala Gly Asn Gly Asn Thr Asn Tyr Ser Gln Asn Phe  $50 \hspace{1cm} 55 \hspace{1cm} 60 \hspace{1cm}$
- Gln Asp Arg Val Ser Ile Thr Arg Asp Thr Ser Ala Asn Thr Val Tyr 65 70 75 80
- Met Glu Leu Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$
- Ala Arg Asp Gly Tyr Tyr Asp Ile Leu Thr Gly Tyr Ser Gly Tyr Tyr 100 105 110
- Met Asp Val Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly 115 120 125
- Gly Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser Ser Glu Leu 130 135 140
- Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}$
- Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln
  165 170 175
- Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asp Asn 180 185 190
- Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp  $210 \hspace{1cm} 225 \hspace{1cm} 220 \hspace{1cm}$
- Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$
- Gly Gly Thr Lys Leu Thr Val Leu Gly

245

<210> 1731 <211> 252

<212> PRT <213> Homo sapiens

<400> 1731

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg 1 5 10 . 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr \$20\$

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val 50 60

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$ 90 95

Ala Arg Asp Arg Leu Glu Tyr Tyr Asp Ile Leu Thr Gly Tyr Tyr Tyr 100 \$105\$

Tyr Tyr Gly Met Asp Val Trp Gly Arg Gly Thr Leu Val Thr Val Ser

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser  $_{130}$   $_{140}$ 

Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr 145 . \$150\$

Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Thr Asn \$165\$

Trp Phe Gln Gln Lys Pro Gly Gln Ala Pro Leu Leu Val Val Tyr Ala \$180\$

Lys Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser 195 \$200\$

Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val 225 230 . 235 240

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly \$245\$

<210> 1732

<211> 248 <212> PRT

<213> Homo sapiens

<400> 1732

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1  $\phantom{\bigg|}$  5  $\phantom{\bigg|}$  10  $\phantom{\bigg|}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr
20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe 50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe  $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Asp Tyr Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr 130 135 140

Gln Asp Pro Ala\_Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145 150 155 160

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln . 165 170 Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg 185 180 Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr 200 205 Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys His Ser Arg Asp Ser Ser Gly Asn His Val Leu Phe Gly Gly 225 230 Gly Thr Lys Leu Thr Val Leu Gly 245 <210> 1733 <211> 248 <212> PRT <213> Homo sapiens <400> 1733 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 5 10 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr 20 25 Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe 50 - 55 60 Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr 65 70 75 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe 100 105 110

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser Asp Ile Val Met

Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Val Gly Asp Arg Val Thr 145 150 155 160

Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Trp Leu Ala Trp Tyr
165 170 175

Gln Gln Lys Pro Gly Arg Ala Pro Lys Val Leu Ile Tyr Lys Ala Ser 180 185 190

Thr Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly 195 200 205

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala 210 \$215\$

Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp Thr Phe Gly Gln 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$  240

Gly Thr Lys Leu Glu Ile Lys Arg 245

<210> 1734

<211> 248

<212> PRT

<213> Homo sapiens

<400> 1734

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1  $$10\$ 

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr 20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr

8.0

70 ...

65

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe 105

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly 120

Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 150 155. 145

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln 165 170

Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg 180 185

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr 195 200 205

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 240 225 230 235

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1735

<211> 254 <212> PRT

<213> Homo sapiens

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Gly 10

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Gly Tyr 2.0 25

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

Ala Ser Val Arg Asn Asp Gly Ser Asn Thr Tyr Tyr Thr Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Thr Lys Asn Thr Leu Tyr  $_{65}$   $\phantom{0}$  70  $\phantom{0}$  75  $\phantom{0}$  80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Ser Gln Ser Asp Tyr Asp Ile Leu Thr Gly Tyr Tyr Tyr Tyr Tyr 100 . 105 110

Tyr Gly Met Asp Val Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser 115 \$120\$

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln 130 135 140

Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser 145 150 155 160

Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn \$165\$

Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met 180 185 · 190

Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser .195 \$200\$

Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln 210 215 220

Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser 225  $_{\odot}$  230 235 240

Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1736

<211> 251 <212> PRT <213> Homo sapiens <400> 1736

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Asp Tyr Thr Phe Thr Ser Tyr  $20 \\ 25 \\ 30$ 

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ 40 \ \ 45$ 

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu 50 60

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe
100 105 110

Asp Tyr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser Gln Ser Val Leu 130 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  160

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 . \$170

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 205

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235 Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 <210> 1737 <211> 248 <212> PRT <213> Homo sapiens <400> 1737 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 5 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe 50 55 Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr 65 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 95 Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe . 100 105 Asp Tyr Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Asp Ile Val Met 130 135 140 Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Val Gly Asp Arg Val Thr

2069

Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Trp Leu Ala Trp Tyr 170

155

160

150

165

Gln Gln Lys Pro Gly Arg Ala Pro Lys Val Leu Ile Tyr Lys Ala Ser 180 185 190

Thr Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly 195 200 205

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala 210 215 220

Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp Thr Phe Gly Gln 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$ 

Gly Thr Lys Leu Glu Ile Lys Arg 245

<210> 1738 · <211> 251

<212> PRT

<213> Homo sapiens

<400> 1738

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1  $\phantom{0}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr His Tyr Ala Gln Lys Leu 50 55 60

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Met Glu Tyr Asp Ile Leu Thr Ser Tyr Tyr Gly Gly Tyr Phe 100 105 110

Asp Tyr Trp Gly Gln Gly Thr Met Val Thr Val Ser Pro Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Gly Gly Gly Ser Gln Ser Val Leu 130

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 150 155 160

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 205

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 225

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1739

<211> 254

<212> PRT

<213> Homo sapiens

<400> 1739

Gly Val Gln Leu Val Glu Ser Gly Gly Gly Leu Ile Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Asn 20' 25 30

Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ser Ala Ile Ser Gly Ser Gly Ser Thr Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys

85 90 95

Ala Lys Ser Gln Ser Asp Tyr Asp Ile Leu Thr Gly Tyr Tyr Tyr Tyr 100 105 110

Tyr Gly Met Asp Val Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser 115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln 130 135 140

Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser 145  $\phantom{000}$  150  $\phantom{000}$  . 155  $\phantom{000}$  160

Ile Thr Val Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn 165 170 175

Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met 180 \$180\$

Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser 195  $\phantom{\bigg|}200\phantom{\bigg|}$ 

Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln 210 220

Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser 225 230 235 240

Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1740

<211> 251

<212> PRT

<213> Homo sapiens

<400> 1740

Glin Val Glin Leu Val Glin Ser Gly Gly Gly Leu Val Glin Pro Gly Gly

1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Asn 20 25 30

Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Ser Gln Ser Asn Tyr Asp Ile Leu Thr Gly Tyr Tyr Tyr Tyr 100 105 110

Tyr Gly Met Asp Val Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser 130 135 140

Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Arg Thr Val 145 \$150\$

Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys  $$180\ \ \, 185\ \ \, 190\ \ \,$ 

Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser 195 200 205

Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu 210 215 220

Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly

<210> 1741

<211> 248

<212> PRT

<213> Homo sapiens

		)> 17 Val		Leu	Val 5	Gln	Ser	Gly	Ala	Glu 10	Val	Lys	Lys	Pro	Gly 15	Ser
,	Ser	Val	Lys	Val 20	ser	Cys	Lys	Ala	Ser 25	Gly	Gly	Thr	Phe	Ser 30	Ser	Tyr
1	Ala	Ile	Ser 35	Trp	Val	Arg	Gln	Ala 40	Pro	Gly	Gln	Gly	Leu 45	Glu	Trp	Met
(	3ly	Gly 50	Ile	Ile	Pro	Ile	Phe 55	Gly	Thr	Ala	Asn	Tyr 60	Ala	Gln	ГÀЗ	Phe
(	31n 65	Gly	Arg	Val	Thr	Ile 70	Thr	Ala	Asp	Glu	Ser 75	Thr	Ser	Thr	Ala	Tyr 80
P	1et	Glu	Leu	Ser	Ser 85	Leu	Arg	Ser	Glu	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys
2	Ala	Arg	Met	Glu 100	Tyr	Asp	Ile	Leu	Thr 105	Gly	Tyr	Tyr	Gly	Gly 110	Tyr	Phe
1	\sp	Tyr	Trp 115	Gly	Gln	Gly	Thr	Leu 120	Val	Thr	Val	Ser	Ser 125	Gly	Gly	Gly
(	31y	Ser 130	Gly	Gly	Gly	Gly	Ser 135	Gly	Gly	Gly	Gly	Ser 140	Ser	Glu	Leu	Thr
	31n 145	Asp	Pro	Ala	Val	Ser 150	Val	Ala	Leu	Gly	Gln 155	Thr	Val	Arg	Ile	Thr 160
(	Cys	Gln	Gly	Asp	Ser 165	Leu	Arg	Ser	Tyr	Tyr 170	Ala	Ser	Trp	Tyr	Gln 175	Gln
Ι	√ys	Pro		Gln 180	Ala	Pro	Val	Leu	Val 185	Ile	Tyr	Gly	Lys	Asn 190	Asn	Arg
I	Pro	Ser	Gly 195	Ile	Pro	Asp	Arg	Phe 200	Ser	Gly	Ser	Ser	Ser 205	Gly	Asn	Thr
I	λla	Ser 210	Leu	Thr	Ile	Thr	Gly 215	Ala	Gln	Ala	Glu	Asp 220	Glu	Ala	Asp	Tyr
	yr 225	Cys	Asn	Ser	Arg	Asp 230	Ser	Ser	Gly	Asn	His 235	Val	Val	Phe	Gly	Gly 240

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1742

<211> 242 <212> PRT

<213> Homo sapiens

<400> 1742

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Asn Tyr

Ala Phe Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asp Tyr Ala Gln Lys Leu 50 55 60

Met Asp Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Thr Gly Met Gly Asp His Tyr Gly Met Asp Val Trp Gly Arg Gly 100 105 110

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser 130  $$135\,{}_{\odot}$$  140

Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Arg Gly Asp Ser Leu 145 150 155 160

Arg Ser Tyr Tyr Thr Asn Trp Phe Gln Gln Lys Pro Gly Gln Ala Pro \$165\$

Leu Leu Val Val Tyr Ala Lys Asn Lys Arg Pro Ser Gly Ile Pro Asp 180 185 190

Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr 195 200 205 Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp 210 215 Ser Ser Gly Asn His Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val 225 230 235 Leu Gly <210> 1743 <211> 245 <212> PRT <213> Homo sapiens <400> 1743 Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser - 10 4 5 Ser Val Arg Val Ser Cys Lys Ala Ser Gly Ala Thr Phe Ser Ser His 25 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Leu 55 Gln Gly Arq Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Val Tyr 65 70 Met Asp Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 . 95 Ala Thr Gly Met Gly Asp His Tyr Gly Met Asp Val Trp Gly Arg Gly 100 105 110 Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly 120 115 125

Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val

Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cye Thr Gly Thr Ser 145  $$155_{\odot}$$ 

Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro 165 170 175

Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser 180 185 190

Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser

Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys 210 215 220

Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Lys 225 230 235 240

Leu Thr Val Leu Gly

<210> 1744 <211> 247 <212> PRT

<213> Homo sapiens

<400> 1744

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1  $\phantom{-}$  5  $\phantom{-}$  10  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Lys Thr Ser Gly Gly Thr Phe Ser Ser Tyr \$20\$ . \$25\$

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Gly Ile Leu Pro Ile Phe Gly Pro Ala Arg Tyr Ala Glu Lys Phe
50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Ala Tyr 65 70 75 80

Met Glu Leu Lys Thr Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Ala Gly Thr Ser Leu Met Asn Tyr Gly Thr Asp Val Trp Gly

100 105 110

Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
115 120 125

Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala 130  $$135\$ 

Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly 145 \$150\$

Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln 165 \$170\$

His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg

Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr 195 200 205

Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr  $210 \\ \hspace{1.5cm} 215 \\ \hspace{1.5cm} 220 \\ \hspace{1.5cm}$ 

Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly 225 \$230\$

Thr Lys Leu Thr Val Leu Gly 245

<210> 1745

<211> 256 <212> PRT

<213> Homo sapiens

<400> 1745

Gln Val Gln Leu Gln Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Glu 1 5 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Gly 20 25 30

Asn Tyr Tyr Trp Ser Trp Val Arg Gln His Pro Gly Lys Gly Leu Glu 35 40 45

Trp Ile Gly Tyr Ile Tyr Asp Ile Gly Asn Thr Tyr Asn Pro Ser Leu 50 55 60

Lvs Ser Arg Val Thr Met Ser Val Asp Thr Ser Lys Asn Gln Phe Ser 70 75 Leu Glu Leu Thr Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys 90 85 Ala Arg Val Pro Tyr Tyr Tyr Asp Thr Ser Gly Gly Tyr Leu Gly Glu 105 100 110 Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Leu Val Thr Val 120 115 ser Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly 130 135 Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly 150 155 160 145 Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly 165 170 175 Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys 180 185 190 Leu Met Ile Tvr Glu Glv Ser Lys Trp Pro Ser Gly Val Ser Asn Arq 205 195 200 Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly 210 215 220 Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr 225 230 235 240 Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 255 245 250 <210> 1746 <211> 247 <212> PRT <213> Homo sapiens

2079

10

15

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser

<400> 1746

Ser Val Lys Val Ser Cys Lys Thr Ser Gly Gly Thr Phe Ser Ser Tyr Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Gly Ile Leu Pro Ile Phe Gly Pro Ala Arg Tyr Ala Glu Lys Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Ala Tyr Met Glu Leu Lys Thr Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg Ala Gly Thr Ser Leu Met Asn Tyr Gly Thr Asp Val Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg 185 190 Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly 

Thr Lys Leu Thr Val Leu Gly 

<210> 1747 <211> 251 <212> PRT <213> Homo sapiens <400> 1747 Glu Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 5 15 10 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 40 Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 60 55 50 Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 7.0 75 Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 95 85 90 Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe 105 110 100 Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu 130 135 140 Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Val Thr Ile 145 150 155 160 Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 170 175 Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Ash Arg Phe Ser Gly Ser Lys

200

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Pro Gln Ala Glu Asp 210 215 Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 230 235 240 Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 <210> 1748 <211> 249 <212> PRT <213> Homo sapiens <400> 1748 Glu Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 10 Ser Val Arg Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Asn Asn Asn 20 Ala Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 40 Gly Gly Ile Ile Pro Met Phe Gly Thr Ala Lys Tyr Ser Gln Asn Phe 55 Gln Gly Arg Val Ala Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Ser 75 70 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Ser Arg Asp Leu Leu Leu Phe Pro His Tyr Gly Met Asp Val 100 Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Ser 115 120 125 Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr Gln 130 135 140

2082

155

160

Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys

150

Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr
165 170 175

Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Gly 180 185 190

Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly

Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala 210 215 220

Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly 225 230 235 240

Gly Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1749

<211> 251 <212> PRT

<213> Homo sapiens

<400> 1749

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Arg Pro Gly Ala 1 5 10 15

Ser Val Val Val Ser Cys Lys Ser Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 \$40\$

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50 55 60

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe  $100 \\ 0.05$ 

Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly

115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 150 155 160

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 170 175

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195  $\phantom{\bigg|}200\phantom{\bigg|}$  205

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 215 220

Gly Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1750

<211> 245

<212> PRT

<213> Homo sapiens

<400> 1750

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Thr Tyr 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Val Tyr 65 70 75 80

Met Asp Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 Ala Thr Gly Met Gly Asp His Tyr Gly Met Asp Val Trp Gly Arg Gly 105 Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly 120 115 125 Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val 130 135 Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser 145 150 155 160 Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro 165 170 175 Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser 180 185 190 Gly Ala Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser 195 200 205 Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys 215 220 210 Ser Ser Tvr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Glu 225 230 235 240 Leu Thr Val Leu Gly 245

<210> 1751 <211> 247

<212> PRT

<213> Homo sapiens

<400> 1751

Gln Val Gln Leu Val Gln Ser Glv Ala Glu Val Lvs Lvs Pro Glv Ser 1 5 10

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Asp Thr Phe Ser Ser Tyr 20 25

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$ \$40\$ \$45\$

Gly Gly Ile Leu Pro Ile Phe Gly Thr Ala Lys Tyr Ala Glu Lys Phe 50 60

Glu Asp Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Ala Tyr 65 70 80

Met Glu Leu Arg Arg Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 . 95

Ala Arg Ala Gly Ser Ser Leu Met Thr Tyr Gly Thr Asp Val Trp Gly
100 105 110

Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala 130 135

Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly 145 150 150

Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Arg Gln 165  $^{\circ}$  170  $^{\circ}$  170 175

His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg 180 185 190

Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr 195 200 205

Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr 210  $$\rm 220$$ 

Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Thr Lys Leu Thr Val Leu Gly 245

<210> 1752 <211> 251

<212> PRT <213> Homo sapiens

<400> 1752 Glu Met Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 10 15 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met  $35^{\circ}$   $\phantom{000}40$ 

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe  $_{\rm 50}$ 

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 . 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys \$85\$ 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe  $100 \,\,$   $105 \,\,$   $110 \,\,$ 

Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu 130 \$135\$

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 \$150\$

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 170 175

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 205

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1753

<211> 249

<212> PRT <213> Homo sapiens

<400> 1753

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr 20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gln Gly Arg Val Thr Leu Thr Ala Asp Lys Ser Thr Gly Thr Ala Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Met Glu Leu Thr Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Glu Asn Tyr Asp Tyr Leu Thr Gly Tyr Tyr Gly Ala Phe Asp  $100 \,\,$ 

% Ile Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115  $$\cdot$$  120 \$125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr 130 135 140

Gln Pro Ala Ser Val Ser Val Ala Leu Gly Gln Thr Val Thr Ile Ser 145 150 155 160

Cys Thr Glu Gly Asp Ser Leu Arg Ser Tyr Tyr Thr Asn Trp Phe Gln
165 170 175

Gln Lys Pro Gly Gln Ala Pro Val Leu Val Val Tyr Ala Lys Asn Asn 180 185 190

Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn

Ala Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp 210 215 220

Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly 225 230 235 240

Gly Gly Thr Lys Leu Thr Val Leu Gly

<210> 1754

<211> 245 <212> PRT

<213> Homo sapiens

<400> 1754

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Asn Tyr 20 25 30

Ala Phe Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Leu  $_{\rm 50}$   $_{\rm 60}$ 

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Val Tyr 65 70 75 80

Ala Thr Gly Met Gly Asp His Tyr Gly Met Asp Val Tr $\dot{p}$  Gly Arg Gly 100 105

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Pro Ser Ala

130 135 140

Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Ser 145 150 155 160

Ser Asn Ile Arg Ser Asn Thr Val Asn Trp Tyr Gln Arg Leu Pro Gly

Ala Ala Pro Gln Leu Leu Ile Tyr Asn Asn Asp Gln Arg Pro Ser Gly 180 185 190

Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Gly Ser Leu
195 200 205

Val Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala 210 215 220

Ser Trp Asp Asp Ser Leu Asn Gly Arg Val Phe Gly Gly Gly Thr Lys  $225 \hspace{1.5cm} 230 \hspace{1.5cm} 235 \hspace{1.5cm} 240 \hspace{1.5cm}$ 

Leu Thr Val Leu Gly 245

<210> 1755

<211> 248

<212> PRT

<213> Homo sapiens

<400> 1755

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr
20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 40 45

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe  $100 ext{ } 105 ext{ } 110 ext{ }$ 

- Asp Ile Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 \$120\$
- Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ser Glu Leu Thr 130 135 140
- Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145 150 155 160
- Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Thr Asn Trp Phe Gln Gln
  165 170 175
- Lys Pro Gly Gln Ala Pro Leu Leu Val Val Tyr Ala Lys Asn Asn Arg 180  $$185\$
- Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Gly Asn Thr
- Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220
- Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$
- Gly Thr Lys Leu Thr Val Leu Gly : 245
- <210> 1756
- <211> 251
- <212> PRT
- <213> Homo sapiens
- <400> 1756
- Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15
- Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Asn Tyr 20 25 30
- Ala Leu Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 \$40\$ .

Gly Gly Ile Ile Pro Met Phe Gly Thr Thr Arg Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Thr Thr Ala Tyr 70 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe 105 Asp Ile Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 120 Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 150 155 Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 170 165 Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 185 180 Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 215 220 210 Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235 Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 250 245

<210> 1757 <211> 245

<212> PRT

<213> Homo sapiens

<400> 1757

Gln 1	Val	Gln	Leu	His 5	Gln	Ser	Gly	Ala	Glu 10	Val	Lys	Lys	Pro	Gly 15	Ser,
Ser	Val	Lys	Val 20	Ser	Cys	Lys	Ala	Ser 25	Gly	Gly	Thr	Phe	ser 30	Asn	Tyr
Ala	Phe	Ser 35	Trp	Val	Arg	Gln	Ala 40	Pro	Gly	Gln	Gly	Leu 45	Glu	Trp	Met
Gly	Gly 50	Ile	Ile	Pro	Ile	Phe 55	Gly	Thr	Ala	Asn	Tyr 60	Ala	Gln	Lys	Leu
Gln 65	Gly	Arg	Val	Thr	Ile 70	Thr	Ala	Asp	Glu	Leu 75	Thr	Arg	Thr	Val	Tyr 80
Met	Asp	Leu	Ser	Ser 85	Leu	Arg	Ser	Glu	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys
Ala	Thr	Gly	Met 100	Gly	Asp	His	Tyr	Gly 105	Met	Ąsp	Val	Trp	Gly 110	Arg	Gly
Thr	Met	Val 115	Thr	Val	Ser	ser	Gly 120	Gly	Gly	Gly	Ser	Gly 125	Gly	Gly	Gly
Ser	Gly 130	Gly	Gly	Gly	Ser	Gln 135	Ser	Val	Leu	Thr	Gln 140	Pro	Pro	Ser	Ala
Ser 145	Gly	Thr	Pro	Gly	Gln 150	Arg	Val	Thr	Ile	Ser 155	Cys	Ser	Gly	Ser	Ser 160
Ser	Asn	Ile	Gly	Ser 165		Thr	Val	Asn	Trp 170	Tyr	Gln	Arg	Leu	Pro 175	Gly
Ala	Ala	Pro	Gln 180	Leu	Leu	Ile	Tyr	Asn 185	Asn	qaA	Gln	Arg	Pro 190	Ser	Gly
Ile	Pro	Asp 195	Arg	Phe	Ser	Gly	Ser 200	Lys	Ser	Gly	Thr	Ser 205	Gly	Ser	Leu
Val	Ile 210	Ser	Gly	Leu	Gln	Ser 215	Glu	Asp	Glu	Ala	Asp 220	Tyr	Tyr	Сув	Ala
Ser 225	Trp	Asp	Asp	Ser	Leu 230	Asn	Gly	Arg	Val	Phe 235	Gly	Gly	Gly	Thr	Lys 240

Leu Thr Val Leu Gly 245

<210> 1758 <211> 251

<212> PRT <213> Homo sapiens

<400> 1758

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 \$40\$

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50 55 60

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe  $100 \\ 0.05$ 

Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 \$120\$

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Arg Ser Val Leu 130 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 150 155 160

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 170 175

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 205

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1759

<211> 254

<212> PRT <213> Homo sapiens

<400> 1759

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 20 25 30

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val \$35\$ 40 45

Ala Val Ile Ser Tyr Asp Gly Ser Ile Lys Tyr Tyr Ala Asp Ser Val 50 · 55 60

Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  $_{65}$   $\phantom{0}$  70  $\phantom{0}$  75  $\phantom{0}$  80

Ala Arg Glu Gly Ser Tyr Asp Ile Leu Thr Gly Tyr Tyr Val Gly Val 100 105 110

Gly Arg Met Asp Val Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser 115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln 130 140

Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser

145 150 155 160 Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn 165 170 Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met 1.85 180 Ile Tvr Glu Glv Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser 195 200 205 Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln 215 220 Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser 230 235 Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 250 <210> 1760 <211> 251 <212> PRT <213> Homo sapiens <400> 1760 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Thr Ser Gly Tyr Asp Phe Ser Asn Tyr Ala Leu His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met 3.5 Gly Trp Ile Asn Gly Gly Asn Asp Asn Thr Arg Tyr Ala Gln Lys Tyr 60 Gln Asp Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 70 Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe

Asp Ile Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu 130 135 140

Thr Gln Pro Ala Ser Val Phe Gly Ser Pro Gly Gln Ser Ile Thr Ile 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  160

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 170 175

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 205

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val  $225 \hspace{1.5cm} 230 \hspace{1.5cm} 235 \hspace{1.5cm} 240 \hspace{1.5cm}$ 

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly  $245 \ \ \,$  250

<210> 1761 <211> 242

<211> 242 <212> PRT

<213> Homo sapiens

<400> 1761

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1  $\phantom{\bigg|}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Asn Tyr 20 25 30

Ala Phe Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$ \$40\$ \$45\$

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Leu  $_{\rm 50}$   $_{\rm 60}$ 

Gln Glv Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Val Tvr 65 70 Met Asp Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 Ala Thr Gly Met Gly Asp His Tyr Gly Met Asp Val Trp Gly Arg Gly 105 Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly 120 Ser Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser 135 Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu 150 Arq Ser Tyr Tyr Thr Asn Trp Phe Gln Gln Lys Pro Gly Gln Ala Pro 170 165 Leu Leu Val Val Tyr Ala Lys Asn Lys Arg Pro Ser Gly Ile Pro Asp 180 185 Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr 195 200 205 Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys His Ser Arg Asp 215 Ser Ser Gly Asn His Val Leu Phe Gly Gly Gly Thr Lys Leu Thr Val 230 235 Leu Glv

<210> 1762 <211> 242

<212> PRT

<213> Homo sapiens

<400> 1762

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser	Val	Lys	Val 20	Ser	Cys	Lys	Ala	Ser 25	Gly	Gly	Thr	Phe	Ser 30	Asn	Tyr
Ala	Phe	Ser 35	Trp	Val	Arg	Gln	Ala 40		Gly	Gln	Gly	Leu 45	Glu	Trp	Met
Gly	Gly 50	Ile	Ile	Pro	Ile	Phe 55	Gly	Thr	Ala	Asn	Tyr 60	Ala	Gln	Lys	Leu
Gln 65	Gly	Arg	Val	Thr	Ile 70	Thr	Ala	Asp	Glu	Leu 75	Thr	Arg	Thr	Val	Tyr 80
Met	Asp	Leu	Ser	Ser 85	Leu	Arg	Ser	Glu	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys
Ala	Thr	Gly	Met 100	Gly	Asp	His	Tyr	Gly 105	Met	Asp	Val	Trp	Gly 110	Lys	Gly
Thr	Leu	Val 115	Thr	Val	Ser	Ser	Gly 120	Gly	Gly	Gly	Ser	Gly 125	Gly	Gly	Gly
ser	Gly 130	Gly	Gly	Gly	Ser	Ser 135	Glu	Leu	Thr	Gln	Gly 140	Pro	Ala	Val	Ser
Val 145	Ala	Leu	Gly	Gln	Thr 150	Val	Arg	Ile	Thr	Cys 155	Gln	Gly	Asp	Ser	Leu 160
Arg	Ser	Tyr	Tyr	Ala 165	Ser	Trp	Tyr	Gln	Gln 170	Lys	Pro	Gly	Gln	Ala 175	Pro
Val	Leu	Val	Ile 180	Tyr	Gly	Lys	Asn	Asn 185	Arg	Pro	ser	Gly	Ile 190	Pro	Asp
Arg	Phe	Ser 195	Gly	Ser	Ser	Ser	Gly 200	Asn	Thr	Ala	Ser	Leu 205	Thr	Ile	Thr
Gly	Ala 210	Gln	Ala	Glu	Asp	Glu 215	Ala	Asp	Tyr		Cys 220	Asn	Ser	Arg	Asp
Ser 225	Ser	Gly	Asn	His	Val 230	Val	Phe	Gly	Gly	Gly 235	Thr	Lys	Leu	Thr	Val 240

Leu Gly

<210> 1763 <211> 251 <212> PRT <213> Homo sapiens <400> 1763

<400> 1763 Glu Val Gln Val Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met \$35\$

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50 55 60

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe

Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu 130 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 150 155 160

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 205

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 215

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly

<210> 1764

<211> 247 <212> PRT

<213> Homo sapiens

<400> 1764

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 20 25 30

Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ser Ser Ile Ser Ser Ser Ser Ser Tyr Ile Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Glu Tyr Asp Ile Leu Thr Gly Leu Leu Gln Gly Met Asp  $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$ 

Val Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ser Glu Leu Thr Gln  $^{\circ}$  130  $^{\circ}$  135

Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys 145 150 155 160

Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys

165 170 175

Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro 180 185 190

Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Asn Thr Ala

Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr 210 215 220

Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly Gly 225 230 235

Thr Lys Leu Thr Val Leu Gly

<210> 1765

<211> 248

<212> PRT

<213> Homo sapiens

<400> 1765 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 40 45

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe . 50 55 60

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr  $_{65}$   $\phantom{0}$  70  $\phantom{0}$  75

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe
100 105 110

Asp Ile Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Gly Gly Gly Ser Ser Glu Leu Thr  $130\,$ 

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145 \$150\$

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Thr Asn Trp Phe Gln Gln 165 170 175

Lys Pro Gly Gln Ala Pro Leu Leu Val Val Tyr Ala Lys Asn Lys Arg 180 185 .190

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr 195 \$200\$

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225 230 235

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1766

<211> 247

<212> PRT

<213> Homo sapiens

<400> 1766

Glu Val Thr Leu Lys Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Arg 1 5 10 15

Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Gly Asp Tyr 20 25 30

Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr 65 70 75 80

Leu Tyr Leu Gln Met Thr Ser Leu Arg Ala Glu Asp Ser Ala Val Tyr 85 90 95

Tyr Cys Val Arg Arg Asp Ile Leu Thr Gly Phe Tyr Asp Ser Trp Gly 100 \$105\$

Arg Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 \$120\$

Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Pro  $130 \ \ 135 \ \ 140$ 

Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly 145 \$150\$

Ser Ser Ser Asn Ile Gly Ser Asn Thr Val Asn Trp Tyr Gln Arg Leu 165 170 175

Pro Gly Ala Ala Pro Gln Leu Leu Ile Tyr Asn Asn Asp Gln Arg Pro 180 185 190

Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Gly
195 200 205

Ser Leu Val Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr 210 215 220

Cys Ala Ser Trp Asp Asp Ser Leu Asn Gly Arg Val Phe Gly Gly Gly 225 230 235 240

Thr Lys Leu Thr Val Leu Gly 245

<210> 1767

<211> 247 <212> PRT

<213> Homo sapiens

<400> 1767

Glu Val Gln Leu Val His Ser Gly Ala Glu Val Lys Lys Pro Gly Ser

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Asn Tyr 20 25 30

Val Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35

Glv Arg Ile Ile Pro Ile Leu Glv Thr Ala Asn Leu Ala Gln Lvs Phe 50 55

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Lys Thr Ala Tyr 65

Met Glu Leu Ser Arg Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85

Ala Thr Gly Tyr Arg Asn Asp Trp Tyr Gly Ala Phe Glu Ile Trp Gly 100 1.05

Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Ser Gly Gly 120 125 115

Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Pro 135 140 130

Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly 145 150 155

Ser Ser Ser Asn Ile Gly Ser Asn Thr Val Asn Trp Tyr Gln Arg Leu 170 165 1.75

Pro Gly Ala Ala Pro Gln Leu Leu Ile Tyr Asn Asn Asp Gln Arg Pro 190 180 185

Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Gly 1.95 200

Ser Leu Val Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr 215 220

Cvs Ala Ser Trp Asp Asp Ser Leu Asn Gly Arg Val Phe Gly Gly Gly 225 230 235 . 240

Thr Lys Leu Thr Val Leu Gly 245

<210> 1768 <211> 251

<212> PRT

<213> Homo sapiens

<400> 1768

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 1 5 10 15

Ser Val Gln Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Phe 20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 40 45

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe  $50 \,$ 

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe  $100 \\ 0.05$ 

Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 \$120\$

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu 130 , 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 150 155 160

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser  $165 \\ 170 \\ 175$ 

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys \$195\$

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 . 215 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1769

<211> 251 <212> PRT

<213> Homo sapiens

<400> 1769

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr

Thr Met His Trp Met Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met
35 40 45

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe  $50 \,$ 

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe 100 105 110

Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser Gln Ser Val Leu 130 135

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu

180

185

190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 205

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly

<210> 1770

<211> 247 <212> PRT

<213> Homo sapiens

<400> 1770 Glu Val Gin Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Thr Ser Gly Gly Thr Phe Ser Ser Tyr

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$

Gly Gly Ile Leu Pro Ile Phe Gly Pro Ala Arg Tyr Ala Glu Lys Phe 50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Ala Tyr 65 70 75 80

Met Glu Leu Lys Thr Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Ala Gly Thr Ser Leu Met Asn Tyr Gly Met Asp Val Trp Gly 100 105 110

Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala 130 135 140 WO 02/02641 PCT/US01/19110 PCT/US01/19110

Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly 145 150 150 155

Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln 165 170 175

His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg 180 185 190

Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr 195 200

Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Thr Lys Leu Thr Val Leu Gly 245

<210> 1771

<211> 248 <212> PRT

<213> Homo sapiens

<400> 1771

Gln Val Gln Leu Leu Gln Ser Ala Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr \$20\$

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$ . \$40\$

Gly Arg Ile Ser Pro Ile Leu Gly Thr Val Asn Tyr Ala Gln Lys Phe 50 55 60 .

Gln Gly Arg Val Thr Ile Ile Ala Asp Lys Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Gly Pro Tyr Asp Ile Leu Thr Gly Tyr Tyr Arg Asp Ala Phe 105 Asp Ile Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 120 Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Glm Met 135 130 Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Ile Gly Asp Arg Val Thr 155 150 Ile Thr Cys Arg Ala Ser Glu Gly Ile Tyr His Trp Leu Ala Trp Tyr 165 170 Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Lys Ala Ser 185 1.80 Ser Leu Ala Ser Gly Ala Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly 200 195 Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Asp Asp Phe Ala 210 215 220 Thr Tyr Tyr Cys Gln Gln Tyr Ser Asn Tyr Pro Leu Thr Phe Gly Gly 230 235 Gly Thr Lys Leu Glu Ile Lys Arg 245 <210> 1772 <211> 252 <212> PRT <213> Homo sapiens <400> 1772 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 10 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Asn Asn His 2.0 25

Ala Ile Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Arg Val Leu Pro Phe Leu Gly Ala Thr Asn Tyr Ala Gln Asn Phe

Gln Gly Arg Val Thr Phe Thr Ala Asp Arg Ser Thr Ser Thr Ala Tyr 55 70 75 80

Met Glu Leu Ser Ser Leu Arg Phe Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Ala Thr His Tyr Asp Ile Leu Thr Gly Tyr Tyr Thr Ala Asp Ala 100 105 110

Phe Asp Ile Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly
115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val 130 140

Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr 145 150 155 160

Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val 165 170 175

Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr 180  $$185\$ 

Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser 195  $200\,$  205

Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Ġln Ala Glu  $210 \,$   $215 \,$   $220 \,$ 

Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$  240

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly
245 250

<210> 1773

<211> 258

<212> PRT <213> Homo sapiens

<400> 1773

Gln Val Gln Leu Val Gln Ser Gly Pro Glu Val Lys Lys Pro Gly Ala

1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Asp  $20 \\ 25 \\ 30$ 

His Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

Gly Trp Ile Ser Pro His His Gly Lys Thr Asn Tyr Ala Gln Lys Leu 50

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Val Gln Met Asp Ser Glu Tyr Tyr Asp Leu Leu Thr Gly Ile 100 105 110

Asn Val Gly Pro Tyr Tyr Phe Asp Tyr Trp Gly Gln Gly Thr Met Val

Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly 130 \$135\$

Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  160

Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val

Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala 180 185 190

Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser 195  $\phantom{\bigg|}200\phantom{\bigg|}$  205

Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile 210 220

Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr 225 230 235 240 Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val \$245\$ \$250\$

Leu Gly

<210> 1774 <211> 251 <212> PRT

<213> Homo sapiens

<400> 1774

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr \$20\$

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met  $35 \ \ 40 \ \ 45$ 

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50 55 60

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Phe Glu Asp Thr Ala Leu Tyr Tyr Cys \$85\$ 90  $\cdot$  95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe  $100 \\ 105 \\ 110$ 

Asp Ile Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser Gln Ser Val Leu 130 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 \$150\$

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu

180 135 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 205

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1775

<211> 251 <212> PRT

<213> Homo sapiens

<400> 1775 Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 40 45

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50 60

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys  $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$ 

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe 100 105 110

Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu 130 135. 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 150 155 160

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 170 175

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Val Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 205

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp-210 215 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val  $225 \hspace{1.5cm} 230 \hspace{1.5cm} 235 \hspace{1.5cm} 240 \hspace{1.5cm}$ 

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1776 <211> 251

<212> PRT

<213> Homo sapiens

<400> 1776

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  $20 \ 25 \ 30$ 

Ala Ile His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met  $35\,$ 

Gln Gly Arg Val Ala Ile Thr Arg Asp Thr Ser Ala Ser Thr Ala Tyr 65 . 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe 105 100 Asp Ile Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 120 115 Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu 135 140 Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 155 Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 185 Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 1.95 200 Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 215 220 210 Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 230 225 Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250 <210> 1777 <211> 253 <212> PRT <213> Homo sapiens Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 5 10 Ser Val Thr Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Thr Tyr 20 Gly Ile Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

Gly Trp Ile Ser Ala Tyr Asn Gly Asp Thr Asn Tyr Ala Gln Glu Leu 50 55 60

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Gly Asp Phe Gly Asp Tyr Asp Ile Leu Thr Gly Tyr Tyr Pro  $100 \ \ 105 \ \ 110$ 

Val Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Met Val Thr Val 115 120 125

Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly 135 \$140\$

Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  160

Thr Val Arg Ile Thr Cys Gln Gly Gly Ser Leu Arg Ser Tyr Tyr Ala 165 170 175

Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr 180 185 190

Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser 195 200 205

Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu 210  $\phantom{\bigg|}215\phantom{\bigg|}$ 

Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His 225 230 235

Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250 .

<210> 1778

<211> 248

<212> PRT <213> Homo sapiens

<400> 1778

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Arg Lys Pro Gly Ala

5 1 10 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 20 25 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly His Gly Leu Glu Trp Met 40 Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu 55 Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 70 Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 90 Ala Arg Ser Tvr Tvr Asp Ile Leu Thr Gly Tyr Tyr Pro Phe Gly Met 105 Asp Val Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Ile Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Glu Gly Ile Tyr His Trp Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Lys Ala Ser Ser Leu Ala Ser Gly Ala Pro Ser Arg Phe Ser Gly Ser Gly . 195 200 Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Asp Asp Phe Ala 215 210

Thr Tyr Tyr Cys Gln Gln Tyr Ser Asn Tyr Pro Leu Thr Phe Gly Gly 225 230 230 235

Gly Thr Lys Leu Glu Ile Lys Arg

<210> 1779

<211> 254 <212> PRT

<213> Homo sapiens

<400> 1779

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Gln Leu 50 55 60

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys \$85\$ 90 95

Asp Ala Phe Asp Ile Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser 115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln 135 140

Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Glu Gln Ser 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}$ 

Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn 165 170 175

Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met

Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser

195 200 205

Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln 210 215 220

Val Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly \$245\$

<210> 1780

<211> 254 <212> PRT

<213> Homo sapiens

<400> 1780

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $$35\,^{\circ}$$ 

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Gln Leu
50 60

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Asp Leu Trp Tyr Tyr Asp Ile Leu Thr Gly Tyr Tyr Leu Asp 100 \$105\$

Asp Ala Phe Asp Ile Trp Gly Lys Gly Thr Thr Val Thr Val Ser Ser

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln  $_{130}^{\rm Gly}$  Gly Ser Gln  $_{135}^{\rm Gly}$ 

Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser 145 150 150 160

Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn 170 175

Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met

+

180 185

Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser 195 200 205

Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln 210 220

Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser 225 \$230\$ 235 \$240\$

Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1781 <211> 246

<212> PRT

<213> Homo sapiens

<400> 1781
Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

Ser Val Arg Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Asn Asn Asn 20 25 30

Ala Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gln Gly Arg Val Ala Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Ser 65 70 75 . 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$ 90 95

Ala arg Ser Arg Asp Leu Leu Leu Phe Pro His Tyr Gly Met Asp Val  $100 \ \ 105 \ \ \ 110$ 

Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser 115 \$120\$

Gly Gly Gly Gly Ser Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp 130 135

Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln 145 \$150\$

Gly Asp Ser Leu Arg Gly Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro \$165\$

Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser 180 185 190

Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser

Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys 210 225 220

Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly Gly Thr 225 \$230\$

Lys Leu Thr Val Leu Gly 245

<210> 1782

<211> 248 <212> PRT

<213> Homo sapiens

<400> 1782

Lys Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15  $^{\circ}$ 

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ile Tyr \$20\$ \$25\$ \$30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val \$35\$

Ser Ala Ile Ser His Asn Ala Asp His Thr Tyr Ser Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Asn Leu Arg Ala Glu Asp Thr Ala Ile Tyr Tyr Cys Ala Ala Thr Arg Met Asp Val Leu Thr Arg Tyr Tyr Ser Asp Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Ser Gly 115 Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro 135 Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr 150 155 Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln 165 170 Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys 180 185 Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn 200 Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp 210 215 Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly 225 230 235

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1783 <211> 251

<212> PRT <213> Homo sapiens

<400> 1783

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 10

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr

2123 .

20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50 55 60

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Gly Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe  $100 \ 105 \ 110$ 

Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser Gln Ser Val Leu . 130 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 150 155 160

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 170 175

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu  $180 \hspace{1cm} 185 \hspace{1cm} 190 \hspace{1cm}$ 

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 205

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1784 <211> 251 <212> PRT

<213> Homo sapiens

<400> 1784

Cly Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 10 15

Ser Val Lys Val Ser Cys Thr Ala Ser Glu Tyr Ser Phe Thr Lys Tyr 20 25 30

Asp Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50 60

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 . 75 80

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe  $100 \,$   $\,$   $105 \,$   $\,$   $\,$   $110 \,$ 

Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 \$120\$

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu  $130 \,$   $135 \,$   $140 \,$ 

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 \$150\$

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 170 175

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu  $180 \hspace{1cm} 185 \hspace{1cm} 185 \hspace{1cm} 190 \hspace{1cm}$ 

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys \$195\$

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp

210 215 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val  $225 \\ 230 \\ 235 \\ 240$ 

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1785

<211> 248

<212> PRT

<213> Homo sapiens

<400> 1785

Gln Val Gln Leu Gln Gln Ser Gly Pro Glu Val Lys Lys Pro Gly Ala 1  $\phantom{-}5\phantom{+}$  10  $\phantom{-}15\phantom{+}$ 

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Leu Ser His Tyr 20 25 30

Ala Leu His Trp Val Arg Gln Ala Pro Gly Gln Arg Pro Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gly Thr Ile Asn Thr Gly Asn Gly Asp Thr Lys Tyr Ser Gln Lys Phe  $50\,$ 

Gln Gly Arg Val Thr Ile Thr Arg Asp Thr Pro Ala Ser Thr Val Asn 65 70 75 80

Met Glu Leu Ser Thr Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Gly Gly Tyr His Asp Thr Leu Thr Ser Tyr Asn Tyr Asn Trp Phe  $100\,$ 

Asp Pro Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser Ser Glu Leu Thr 130 135 140

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145 150 155 160

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Thr Asn Trp Phe Gln Gln 165 170 175

Lys Pro Gly Gln Ala Pro Leu Leu Val Val Tyr Ala Lys Asn Lys Arg

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys His Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225 230 235

Gly Thr Lys Leu Thr Val Leu Gly

<210> 1786

<211> 255 <212> PRT

<213> Homo sapiens

<400> 1786

Glu Val Gln Leu Val Gln Ser Gly Ser Glu Val Lys Lys Pro Gly Ser 1 5 10

Ser Val Thr Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Gly Thr Tyr \$20\$ \$25\$ \$30

Gly Val Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Ala Gln Met Asp Ser Glu Tyr Tyr Asp Leu Leu Thr Gly Ile . 100 105 110

Asn Val Gly Pro Tyr Tyr Phe Asp Tyr Trp Gly Gln Gly Thr Met Val 115 \$120\$ 125 .

Thr Val Ser Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly 135 130 Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu 150 155 145 Glv Gln Thr Val Arg Ile Thr Cvs Gln Glv Asp Ser Leu Arg Ser Tvr 165 170 Tyr Thr Asn Trp Phe Gln Gln Lys Pro Gly Gln Ala Pro Leu Leu Val 185 Val Tyr Ala Lys Asn Lys Arg Pro Ser Gly Ile Pro Gly Arg Phe Ser 200 Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln 215 Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly 235 . 225 . 230 Asn His Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250 <210> 1787 <211> 252 <212> PRT <213> Homo sapiens <400> 1787 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 5 10 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 40 Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50 Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 70 75

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe  $100 \ 105 \ 110$ 

Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Gly Gly Gly Ser Ala Gln Ser Val  $130 \ 135 \ 140$ 

Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr 145 150 155

Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val \$165\$ \$170\$

Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser 195  $200\,$ 

Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu 210 215 220

Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg 225 \$230\$

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1788

<211> 241

<212> PRT

<213> Homo sapiens

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Asn Tyr 20 25 30

Ala Phe Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

35 40 45

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Leu
50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Val Tyr  $65 \hspace{1cm} 70 \hspace{1cm} 75 \hspace{1cm} 80$ 

Met Asp Leu Gly Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Thr Gly Met Gly Asp His Tyr Met Asp Val Trp Gly Arg Gly Thr

Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser 115 120 125

Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val  $130 \,$   $135 \,$   $140 \,$ 

Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg 145 150 155 160

Ser Tyr Tyr Thr Asn Trp Phe Gln Gln Lys Pro Gly Gln Ala Pro Leu 165 \$170\$

Leu Val Val Tyr Ala Lys Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg

Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly

Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys His Ser Arg Asp Ser 210 215 220

Ser Gly Asn His Val Leu Phe Gly Gly Gly Thr Lys Leu Thr Val Leu 225 230 235 240

Gly

<210> 1789

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1789 Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Asn Ser 20 25 Pro Ile Asn Trp Leu Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Ser Ile Ile Pro Ser Phe Gly Thr Ala Asn Tyr Ala Gln Arg Phe . 55 Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala His 70 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys Ala Arg Glu Met Gly Tyr Asp Ile Leu Thr Gly Tyr Tyr Leu Asn Tyr Met Asp Val Trp Gly Lys Gly Thr Thr Val Thr Val Ser Ser Gly Gly 115 120 Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val 135 Leu Thr Gln Pro Pro Ser Val Ser Gly Ala Pro Gly Gln Thr Val Thr 150 Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val 165 170 Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr 185 Glu Gly Ser Lys Gln Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser 195 200 Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu 210 215 220 Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg

230 235 240 225

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly

<210> 1790

<211> 248

<212> PRT

<213> Homo sapiens

<400> 1790

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 10

Ser Val Lys Val Ser Cys Lys Thr Ser Gly Tyr Ser Phe Thr Ser Tyr 20 25

Ala Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

Gly Lys Ile Asn Pro Ser Gly Thr Ser Val Thr Tyr Ala Gln Arg Phe 55

Gln Gly Arg Val Thr Leu Thr Arg Asp Thr Ser Thr Ser Thr Asn Tyr

Met Glu Val Asn Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys

Ala Ser Gln His Tyr Asp Ile Leu Thr Gly Tyr Ser Gln Glu Pro Phe

Asp Ile Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120

Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr 130 - 135

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145 150 155 160

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln 170 175 165

Lys Pro Gly Gln Ala Pro Val Pro Val Ile Tyr Gly Lys Asn Asn Arg 1.80 185 190

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225 230 235 240

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1791

<211> 256

<212> PRT <213> Homo sapiens

<400> 1791

Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Asp  $20 \\ 25 \\ 30$ 

Trp Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

Gly Arg Ile Lys Ser Lys Thr Asp Gly Gly Thr Thr Asp Tyr Ala Ala 50 60

Pro Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr 65 70 75 80

Leu Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr  $85 \hspace{0.25in} 90 \hspace{0.25in} 95$ 

Tyr Cys Thr Thr Phe Asn Pro Thr Tyr Asp Ile Leu Thr Gly Tyr Tyr 100 \$105\$

Ile Gly Gly Tyr Phe Gln His Trp Gly Arg Gly Thr Leu Val Thr Val 115 \$120 \$125

Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Gly Gly 130 135 140

Ser 145	Gln	Ser	Val	Leu	Thr 150	Gln	Pro	Pro	Ser	Ala 155	Ser	Gly	Ser	Pro	Gly 160
Gln	Ser	Val	Thr	Ile 165	Ser	Cys	Thr	Gly	Thr 170	Ser	Ser	Asp	Val.	Gly 175	Gly
Tyr	Asn	Tyr	Val 180	Ser	Trp	Tyr	Gln	Gln 185	His	Pro	Gly	Lys	Ala 190	Pro	Lys
Phe	Met	Ile 195	Tyr	qaA	Val	Ser	Lys 200	Arg	Pro	Ser	Gly	Val 205	Ser	Asn	Arg
Phe	Ser 210	Gly	Ser	Lys	Ser	Gly 215	Asn	Thr	Ala	Ser	Leu 220	Thr	Ile	Ser	Gly
Val 225	Gln	Ala	Glu	Asp	Glu 230	Ala	Asp	Tyr	Tyr	Cys 235	Ser	Ser	туг	Thr	Ser 240
Ala	Ser	Thr	Val	Ile 245	Phe	Gly	Gly	Gly	Thr 250	Lys	Leu	Thr	Val	Leu 255	Gly
<210> 1792 <211> 251 <212> PRT <213> Homo sapiens															
<213 <213	1> 25 2> PI	51 RT	sapie	ens											
<213 <213 <213	1> 25 2> PI 3> Ho 0> 17	51 RT omo s 792	sapie Leu		Gln	Ser	Gly	Ala	Glu 10	Val	Lys	Lys	Pro	Gly 15	Ala
<211 <213 <213 <400 Glu 1	1> 25 2> PI 3> Ho 0> 17 Val	51 RT omo s 792 Gln		Val 5					10					15	
<213 <213 <400 Glu 1	1> 25 2> PI 3> Ho 0> 17 Val	SI ST DMO : 792 Gln Lys	Leu Val	Val 5	Cys	Arg	Ala	Ser 25	10 Gly	Tyr	Thr	Phe	Thr 30	15 Lys	Tyr
<213 <213 <400 Glu 1 Ser	1> 25 2> PI 3> Ho 0> 10 Val Val	FI OMO S 792 Gln Lys His 35	Leu Val 20	Val Ser Val	Cys Arg	Arg Gln	Ala Ala 40	Ser 25 Pro	Gly Gly	Tyr Gln	Thr Gly	Phe Pro 45	Thr 30	15 Lys Trp	Tyr Met
<21: <21: <21: <400 Glu 1 Ser	1> 2: 2> PF 3> Ho Val Val Trp 50	STORT STORE	Leu Val 20	Val Ser Val	Cys Arg Gly	Arg Gln Ser 55	Ala Ala 40	Ser 25 Pro	Gly Gly Thr	Tyr Gln Lys	Thr Gly Tyr 60	Phe Pro 45	Thr 30 Glu Arg	Lys Trp Lys	Tyr Met

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe \$100\$

Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu 130 135

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 \$150\$

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser \$165\$

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys \$195\$

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 - 250

<210> 1793

<211> 251

<212> PRT

<213> Homo sapiens

<400> 1793

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1  $\phantom{-}$  10  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met

Gly Trp Val Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe

50 55 60

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe 100 105 110

Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 \$120\$

Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser Gln Ser Val Leu 130 135

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 150 150 155

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 170 175

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Glu Leu Met Ile Tyr Glu 180  $$185\$ 

Gly Ser Lys Arg Pro Ser Gly Val Pro Asn Arg Phe Ser Gly Ser Lys

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1794

<211> 245

<212> PRT

<213> Homo sapiens

<400> 1794

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Asn Tyr 20 25 30

Ala Phe Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Leu  $50 \ \ 55 \ \ \ 60$ 

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Val Tyr  $_{65}$   $\phantom{0}70$   $\phantom{0}75$   $\phantom{0}80$ 

Met Asp Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Thr Gly Met Gly Asp His Tyr Gly Met Asp Val Trp Gly Arg Gly 100 \$105\$

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly 125 \$120\$

Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Pro Ser Ala 130 135 140

Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Ser 145 \$150\$ 155 \$160\$

Ser Asn Ile Gly Ser Asn Thr Val Asn Trp Tyr Gln Arg Leu Pro Gly \$165\$

Ala Ala Pro Gln Leu Leu Ile Tyr Asn Asn Asp Gln Arg Pro Ser Gly 180 \$180\$

Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Gly Ser Leu 195  $\phantom{\bigg|}200\phantom{\bigg|}$ 

Val Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala 210 215 220

Ser Trp Asp Asp Gly Leu Asn Gly Arg Val Phe Gly Gly Gly Thr Lys 225 235 240

Leu Thr Val Leu Gly

245

<210> 1795 <211> 251

<212> PRT <213> Homo sapiens

<400> 1795

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ala Lys Tyr  $\phantom{-}20\phantom{+}25\phantom{+}25\phantom{+}$ 

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 40 45

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe
50 55 60

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe 100 105 110

Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu 130 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 150 155 160

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys  $195 \hspace{0.25in} 200 \hspace{0.25in} 205$ 

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 215 Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 235 230 Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 <210> 1796 <211> 254 <212> PRT <213> Homo sapiens <400> 1796 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arq 5 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Arg Asn Tyr 20 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 4.0 Ala Val Ile Ser Tyr Asp Gly Arg Ile Lys Asn Tyr Gly Asp Ser Val 50 55 60 Lys Gly Arg Phe Thr Gly Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 Leu Glu Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys 8.5 90 95 Ala Thr Glu Val Arg Asn Tyr Asp Leu Leu Thr Arg Ser Tyr Leu Ala 100 105 1.1.0 Gly Pro Leu Asp Asn Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser 115 120 125 Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln

Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser 145  $$150\$ 

135

130

Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn 165 170 175 Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met 180 185 Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser 200 Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln 215 210 Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser 225 230 235 Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250 <210> 1797 <211> 250 <212> PRT <213> Homo sapiens <400> 1797 Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Arg 5 10 Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Gly Asp Tyr 20 25 3.0 Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 Gly Phe Ile Arg Ser Lys Ala Tyr Gly Gly Thr Thr Glu Tyr Ala Ala 50 55 60 Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ile 75 70 Ala Tvr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tvr 85 90 Tyr Cys Thr Thr Gln Tyr Tyr Asp Ile Leu Thr Gly Tyr Glu Leu Asp 105 110

Ile Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr

Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser 145 150 155 160

Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp \$165\$ \$170\$

Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly 180 185 190

Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser 195 200 205

Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu 210 \$215\$

Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe 225 230 235

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1798

<211> 251

<212> PRT

<213> Homo sapiens

<400> 1798

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Thr Val Lys Val Ser Cys Lys Val Ser Gly Phe Thr Phe Thr Lys Tyr
20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 40 45

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50 60

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr

65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe  $100 \,$   $\,$   $105 \,$   $\,$   $\,$   $110 \,$ 

Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu 130 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 \$150\$

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 170 175

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 205

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1799 <211> 258 <212> PRT

<213> Homo sapiens

<400> 1799
Gln Val Gln Leu Gln Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
1
5
10
15

Thr Leu Ser Leu Ser Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Asn 20 25 30

Ser Ala Ala Trp Asn Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu 35 40 45

Trp Leu Gly Arg Thr Tyr Tyr Arg Ser Lys Trp Tyr Asn Asp Tyr Ala
50 60

Val Ser Val Lys Ser Arg Met Thr Ile Asn Pro Asp Thr Ser Arg Asn 65 70 75 80

Gln Phe Ser Leu Gln Leu Asn Ser Val Thr Pro Glu Asp Thr Ala Val 85 90 95

Tyr Tyr Cys Ala Arg Glu Gly Ala His Tyr Asp Ile Leu Thr Gly His 100 105 110

Asn Tyr Tyr His Tyr Gly Met Asp Val Trp Gly Lys Gly Thr Met Val 115 120 125

Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly 130 135 140

Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser 145  $$150\$ 

Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val  $_{165} \\$   $_{170}$   $_{170}$ 

Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala 180 \$185\$

Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser 195 200 205

Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile 210 \$215\$

Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr 225  $$^{\circ}230$$  230 235 240

Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val

Leu Glv

<210> 1800 <211> 251 <212> PRT <213> Homo sapiens

<400> 1800

Gly Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met .35 \$40\$

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe  $_{50}$ 

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr  $_{65}$   $\phantom{0}^{70}$   $\phantom{0}^{75}$  80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 . 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe 100 105 110

Asp The Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu 130 135

Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}155\phantom{\bigg|}$ 

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 \$170\$

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys \$195\$

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 225

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val  $225 \hspace{1.5cm} 230 \hspace{1.5cm} 235 \hspace{1.5cm} 235 \hspace{1.5cm} 240$ 

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1801 <211> 251 <212> PRT

<213> Homo sapiens

<400> 1801

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1  $\phantom{-}$  10  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr  $20 \ 25 \ 30$ 

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met \$35\$ \$40\$

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr  $_{65}$   $\phantom{0000}$  70  $\phantom{0000}$  75  $\phantom{0000}$  80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Leu Asp Gly Phe  $100\,$ 

Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser Gln Ser Val Leu 130 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 \$150\$

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 170 Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 200 Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 215 Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 235 Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 <210> 1802 <211> 251 <212> PRT <213> Homo sapiens Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Ser Tyr Ala Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Lys Ile Asn Pro Ser Gly Thr Ser Val Thr Tyr Ala Gln Arg Phe 55 Gln Gly Arg Val Thr Leu Thr Arg Asp Thr Ser Thr Ser Thr Asn Tyr 70 , 75 80 Met Glu Val Asn Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85

Asp Ile Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu 130 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 \$150\$

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 170 175

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys \$195\$

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1803

<211> 251

<212> PRT <213> Homo sapiens

<400> 1803

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 40 45

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50 60

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr

65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe 100 105 110

Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Gly Gly Gly Ser Gln Ser Ala Leu 130 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 \$150\$

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 170 175

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 205

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1804 <211> 250

<212> PRT

<213 > Homo sapiens `

<400> 1804 Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

- Gln Gly Arg Val Thr Leu Thr Ala Asp Lys Ser Thr Gly Thr Val Tyr 65 70 75 80
- Met Glu Leu Thr Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95
- Ala Arg Glu Asn Tyr Asp Phe Leu Thr Gly Tyr Tyr Gly Ala Phe Asp 100 \$100\$
- Ile Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125
- Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr
- Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser 145 \$150\$
- Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp
- Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly 180 185 190
- Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser 195 200 205
- Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu 210 215 220
- Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$  240
- Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1805

<211> 251 <212> PRT

<213> Homo sapiens

<400> 1805 Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala

Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Ser Leu Thr Lys Tyr 20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 40 45

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe  $50\cdot\phantom{000}55$ 

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe

Asp Ile Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu 130 135

Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile 145 150 155 160

Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn Thr Val Asn Trp 165 170 175

Tyr Gln Arg Leu Pro Gly Ala Ala Pro Gln Leu Leu Ile Tyr Asn Asn 180  $\,\cdot\,$  185  $\,$  190

Asp Gln Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser 195 200 205

Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu 210 \$215\$

Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1806

<211> 251

<212> PRT

<213> Homo sapiens

<400> 1806

Glu Val Gin Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr  $_{20}$   $_{25}^{-}$  .

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45 \hspace{1cm}$ 

Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe  $50 \,$ 

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ile Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe  $100 \\ 105 \\ 110$ 

Asp Ile Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 \$120\$

Gly Ser Gly Gly Gly Gly Gly Gly Gly Ser Gln Ser Val Leu  $130\,$ 

Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile 145 \$150\$

Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn Thr Val Asn Trp
165 170 175 .

Tyr Gln Arg Leu Pro Gly Ala Ala Pro Gln Leu Leu Ile Tyr Asn Asn 180 185 190

Asp Gln Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser 195 200 205

Gly Thr Ser Gly Ser Leu Val Ile Ser Gly Leu Gln Ser Glu Asp Glu 210 215 220

Ala Asp Tyr Tyr Cys Ala Ser Trp Asp Asp Ser Leu Asn Gly Arg Val 225 230 235

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1807

<211> 251 <212> PRT

<213> Homo sapiens

<400> 1807

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1  $\phantom{-}$  10  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr

Ala Met His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met 35 40 45

Gly Trp Ile Asn Ala Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe  $_{50}$ 

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys \$85\$ 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe

Asp Ile Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu 130 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 \$150\$

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser \$165\$

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu  $180 \,$   $185 \,$   $190 \,$ 

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys \$195\$

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210  $$\rm 220$$ 

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1808

<211> 251

<212> PRT <213> Homo sapiens

<400> 1808

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr
20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 40 45

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe  $_{\rm 50}$   $_{\rm 60}$ 

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys

85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe  $100 \ \ \, \cdot \ \, 105 \ \ \, \, 110$ 

Asp Ile Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 \$120\$

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu 130 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 150 150 160

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 170 175

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys \$195\$

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val  $225 \hspace{1.5cm} 230 \hspace{1.5cm} 235 \hspace{1.5cm} 240 \hspace{1.5cm}$ 

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly \$245\$

<210> 1809

<211> 251 <212> PRT

<213> Homo sapiens

<400> 1809

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1  $\phantom{-}$  10  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Gly Ser His

Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45 \hspace{1cm}$ 

Gly	Gly 50	Ile	Ile	Pro	Lys	Tyr 55	Ser	Ala	Pro	Lys	Tyr 60	Ala	Gln	Glu	Phe
Gln 65	Gly	Arg	Val	Thr	Met 70	Thr	Arg	Asp	Thr	Ser 75	Ile	Ser	Thr	Ala	Tyr 80
Met	Glu	Leu	Ser	Arg 85	Leu	Arg	Ser	Asp	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys
Ala	Arg	Gly	Glu 100	Tyr	Asp	Ile	Leu	Thr 105	Gly	Tyr	Pro	Tyr	Trp 110	Tyr	Phe
		115	Gly				120					125			
	130		Gly			135			-	-	140				
145			Pro		150					155					160
	•		Gly	165					170			-		175	-
•			His 180		·	-		185	-				190		
	-	195	Pro Ala				200					205			
чтУ	ASD	ser	ALA	ser	пеп	ASD	TTE	ser	OTA	пеп	GTII	oer	GTU	Wab	GIU

Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu Ser Glu Phe Leu 230 235 240

215 220

Phe Gly Thr Gly Thr Lys Leu Thr Val Leu Gly. 245 250

<sup>&</sup>lt;210> 1810

<sup>&</sup>lt;211> 251 <212> PRT

<sup>&</sup>lt;213> Homo sapiens

<400> 1810 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 Ala Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 70 Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe 105 Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu 130 135 Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 150 145 155 Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 170 165 Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190 Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 205

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Pro Gln Ala Glu Asp  $210 \\ 215 \\ 220$ 

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Pro Gly 245 250

<210> 1811 <211> 251 <212> PRT

<213> Homo sapiens

<400> 1811

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 40 45

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50 55 60

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe \$100\$

Asp Ile Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu 130 \$135\$

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 150 155 160

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 170 175

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 205

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225  $\phantom{\bigg|}230\phantom{\bigg|}225\phantom{\bigg|}235.\phantom{\bigg|}$ 

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1812 <211> 251

<212> PRT

<213> Homo sapiens

<400> 1812

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Arg Arg Pro Gly Ala 1  $\phantom{-}$  10  $\phantom{-}$  15

Ser Val Arg Val Ser Cys Arg Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Ala Ile His Trp Ile Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met \$35\$ \$40\$ \$45\$

Gly Trp Ile Asn Ala Ala Asn Gly Val Thr Asn Tyr Ser Asp Asp Phe 50 55 60

Gln Asp Arg Val Thr Leu Thr Arg Asp Thr Ser Ala Arg Thr Ala Tyr 65  $^{\circ}$  70  $^{\circ}$  75  $^{\circ}$  80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe  $100 \\ 0.05$ 

Asp Ile Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu 130 135 140

Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile 145 150 155 160

Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn Thr Val Asn Trp

Tyr Gln Arg Leu Pro Gly Ala Ala Pro Gln Leu Leu Ile Tyr Asn Asn 180 185 190

Asp Gln Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser 195 200 205

Gly Thr Ser Gly Ser Leu Val Ile Ser Gly Leu Gln Ser Glu Asp Glu 210 215 220

Ala Asp Tyr Tyr Cys Ala Ser Trp Asp Asp Ser Leu Asn Gly Arg Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1813

<211> 253

<212> PRT

<213> Homo sapiens

<400> 1813

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Arg Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Asn Tyr \$20\$

Ala Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

Gly Gly Ile Ile Pro Met Phe Gly Thr Thr Arg Tyr Ala Gln Lys Phe 50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 . 90 95

Ala Arg Asp Gly Ser Tyr Asp Ile Leu Thr Gly Tyr Tyr Ile Asp Asn

100 105 110

Tyr Met Asp Val Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly

Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser

Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile 145  $\,$  150  $\,$  155  $\,$  160

Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr 165 170 175

Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile 180 185 190

Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly 195 200 205

Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala  $210 \\ \hspace*{1.5cm} 215 \\ \hspace*{1.5cm} 220 \\ \hspace*{1.5cm}$ 

Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr 225 230 235 240

Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly \$245\$

<210> 1814

<211> 253

<212> PRT <213> Homo sapiens

<400> 1814

Gln Val Gln Leu Val Gln Ser Gly Gly Ser Leu Val Gln Pro Gly Gly

Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu 75 70 65 Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala 90 Arg Gly Glu Gly Gly Tyr Asp Ile Leu Thr Gly Tyr Leu Arg Gly Tyr 100 Gly Met Asp Val Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly 115 120 Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser 130 135 Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile 145 150 Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr 165 170 Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile 185 180 Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly 200 1.95 Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala 215 Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr 235 23.0 Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250 <210> 1815 <211> 245 <212> PRT <213> Homo sapiens <400> 1815

2161

10

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Asn Tyr Ala Phe Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn His Ala Gln Lys Leu Gln Glv Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Val Tyr 70 Met Asp Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 90 Ala Thr Gly Met Gly Asp His Tyr Gly Met Asp Val Trp Gly Arg Gly 105 Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Leu Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Ser 145 150 Ser Asn Ile Gly Ser Asn Thr Val Asn Trp Tyr Gln Arg Leu Pro Gly 165 Ala Ala Pro Gln Leu Leu Ile Tyr Asn Asn Asp Gln Arg Pro Ser Gly 180 185 Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Gly Ser Leu. 195 200 Val Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala 210 215 220 Ser Trp Asp Asp Ser Leu Asn Gly Arg Val Phe Gly Gly Gly Thr Lys 225 230 235

Leu Thr Val Leu Gly 245

<210> 1816 <211> 248 <212> PRT <213> Homo sapiens															
	0> 1: Val		Leu	Gln 5	Gln	Ser	Gly	Aļa	Glu 10	Val	Lys	Lys	Pro	Gly 15	Ser
Ser	Val	Lys	Val 20	Ser	Cys	Lys	Ala	Ser 25	Gly	Gly	Thr	Phe	Asn 30	Met	Phe
Ser	Val	Ser 35	Trp	Leu	Arg	Gln	Ala 40	Pro	Gly	Gln	Gly	Leu 45	Glu	Trp	Met
Gly	Ser 50	Ile	Ile	Pro	Leu	Leu 55	Gly	Ser	Thr	Asn	Tyr 60	Ala	Gln	Lys	Phe
Gln 65	Gly	Arg	Ile	Thr	Ile 70	Thr	Ala	Asp	Asp	Pro 75	Met	Thr	Thr	Ala	Tyr 80
Met	Glu	Leu	ser	Ser 85	Leu	Lys	Ser	Glu	Asp 90	Thr	Ala	Leu	Tyr	Tyr 95	
Ala	Arg	Ala	Thr 100	Tyr	Asp	Pro	Leu	Thr 105	Gly	Tyr	Ser	Phe	Asp 110	Gly	Phe
Asp	Ile	Trp 115	Gly	Gln	Gly	Thr	Leu 120	val	Thr	Val	Ser	Ser 125	Gly	Gly	Gly
Gly	Ser 130	Gly	Gly	Gly	Gly	Ser 135	Gly	Gly	Gly	Gly	ser 140	Ser	Glu	Leu	Thr
Gln 145	Asp	Pro	Ala	Val	Ser 150	Val	Ala	Leu	Gly	Gln 155	Thr	Val	Arg	Ile	Thr 160
Cys	Gln	Gly	Asp	Ser 165	Leu	Arg	Ser	Tyr	Tyr 170	Thr	Asn	Trp	Phe	Gln 175	Gln
Lys	Pro	Gly	Gln 180	Ala	Pro	Leu	Leu	Val 185	Val	Tyr	Ala	Lys	Asn 190	Lys	Arg
Pro		Gly 195	Ile	Pro	Asp		Phe		Gly	Ser		Ser		Asn	Thr

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 215 210 Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 230 225 235 Glv Thr Lvs Leu Thr Val Leu Glv 245 <210> 1817 <211> 249 <212> PRT <213> Homo sapiens <400> 1817 Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 25 Glu Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ala Ser Ile Lys Glu Asp Gly Thr Asp Lys Tyr Tyr Val Glu Ser Val 55 Arg Gly Arg Phe Gly Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Ser Leu Gln Met Asn Ser Leu Arg Val Glu Asp Thr Ala Val Tyr Tyr Cys 90 Ala Arg Gly Ser Tyr Tyr Asp Ile Leu Thr Gly Ile Ser Ser Leu Gly 105 100 Met Asp Val Trp Gly Lys Gly Thr Thr Val Thr Val Ser Ser Gly Gly 115 120 Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ser Glu Leu 130 1:35

155

160

Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile

150

Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Thr Asn Trp Phe Gln 165 170 175

Gln Lys Pro Gly Gln Ala Pro Leu Leu Val Val Tyr Ala Lys Asn Lys 180 185 190

Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn 195 200 205

Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp 210 215 220

Tyr Tyr Cys His Ser Arg Asp Ser Ser Gly Asn His Val Leu Phe Gly 225 230 235

Gly Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1818

<211> 246

<212> PRT <213> Homo sapiens

<400> 1818

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Arg Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Asn Asn Asn 20 25 30

Ala Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35  $$40\$ 

Gly Gly Ile Ile Pro Met Phe Gly Thr Ala Lys Tyr Ser Gln Asn Phe

Gln Gly Arg Val Ala Ile Ile Ala Asp Glu Ser Thr Ser Thr Ala Ser 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $$85\ ^{\circ}$$  90 95

Ala Arg Ser Arg Asp Leu Leu Leu Phe Pro His Tyr Gly Met Asp Val

Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Ser

115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp

Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln 145 \$150\$

Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro 165 170 175

Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser \$180\$

Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser 195 200 205

Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys 210 215 220

Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly Gly Thr 225 230 235 . 240

Lys Leu Thr Val Leu Gly 245

<210> 1819

<211> 255

<212> PRT <213> Homo sapiens

<400> 1819

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asp Tyr

Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ser Tyr Ile Ser Ser Ser Ser Tyr Thr Asn Tyr Ala Asp Ser Val · 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Pro Ser Gly Phe Asp Tyr Trp Gly Lys Gly Thr Leu Val Thr Val Ser 115  $$120\$ 

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser 130 140

Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln 145 \$150\$

Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr 165 170 175

Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu 180 185 190

Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe 195  $\phantom{\bigg|}200\phantom{\bigg|}$  205

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu 210  $\phantom{\bigg|}215\phantom{\bigg|}$  .  $\phantom{\bigg|}220\phantom{\bigg|}$ 

GIn Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg 225 230 235 240

Ser Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly \$245\$ .

<210> 1820 <211> 245

<211> 245 <212> PRT

<213> Homo sapiens

<400> 1820

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Asp Tyr 20 25 30

Tyr Met Asp Trp Val Arg Gln Val Pro Gly Lys Gly Leu Glu Trp Leu 35 . 40 45

Gly Arg Thr Lys Asn Lys Gly Tyr Thr Thr Gln Tyr Ala Ala Ser Val 50 60

Lys Gly Arg Phe Ser Ile Ser Arg Asp Asp Leu Thr Asn Leu Leu Phe  $_{65}$   $\phantom{0}$  70  $\phantom{0}$  75  $\phantom{0}$  80

Leu Gln Leu Asn Gly Leu Lys Thr Glu Asp Thr Ala Ile Tyr Tyr Cys 85 90 95

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val 130 \$135\$

Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser 145 \$150\$

Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro  $165 \ \ 170 \ \ 175$ 

Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser 180 \$180\$

Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser 195 200 205

Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys 210 215 220

Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Lys  $225 \hspace{1.5cm} 230 \hspace{1.5cm} 235 \hspace{1.5cm} 240 \hspace{1.5cm}$ 

Leu Thr Val Leu Gly 245

<210> 1821 <211> 252

<212> PRT <213> Homo sapiens

<400> 1821

Gly Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ile Thr Phe Thr Asn Ala 20 25 30

Trp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Leu 35 40 45

Gly Arg Val Lys Ser Lys Val Asp Gly Gly Thr Val Asp Tyr Ala Ala 50 60

Pro Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Leu Ile Asn Thr 65 70 75 80

Leu Phe Leu Gln Ile Asn Ser Leu Lys Ala Glu Asp Thr Gly Val Tyr 85 90 95

Tyr Cys Thr Thr Gly Gly Met Ile Arg Ala Arg Glu Asp Tyr Tyr Tyr 100 105 110

Met Asp Val Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val \$130\$ \$140

Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr 145 150 155 160

Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val

Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr 180 185 190

Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser 195 200 205

Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu 210  $$\rm 215$$ 

Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg 225 230 235 240

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1822

<211> 251 <212> PRT

<213> Homo sapiens

<400> 1822

Gly Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe  $50 \ \ 55 \ \ 60$ 

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 .  $\phantom{0000}70\phantom{0000}75\phantom{0000}$ 

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe

Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu 130 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 150 155 160

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser \$165\$ \$170\$

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 205

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1823

<211> 248

<212> PRT <213> Homo sapiens

<400> 1823

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ala Phe Thr Lys Tyr \$20\$

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 40 45

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe  $50 \hspace{1cm} 55 \hspace{1cm} 50 \hspace{1cm} 60 \hspace{1cm}$ 

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr  $_{65}$  70  $_{75}$  80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe

Asp Ile Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr

130 135 140

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Val Thr 145 \$150\$

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Thr Asn Trp Phe Gln Gln 165 \$170

Lys Pro Gly Gln Ala Pro Leu Leu Val Val Tyr Ala Lys Asn Lys Arg 180 185 190

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr 195 200 205

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1824

<211> 251

<212> PRT

<213> Homo sapiens

<400> 1824

Lys Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr \$20\$

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 40 45

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe  $100 \,$   $105 \,$   $110 \,$ 

Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Pro 130  $$\rm 140$ 

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 \$150\$

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 170 175

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1825

<211> 251

<212> PRT

<213> Homo sapiens

<400> 1825

Gly Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr  $20 \\ 25 \\ 30$ 

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met

Gly	Trp 50	Ile	Asn	Gly	Gly	Ser 55	Gly	Asp	Thr	Ьув	Tyr 60	Ser	Arg	Lys	Phe
Gln 65	Gly	Arg	Val	Thr	Tle 70	Thr	Lys	Asp	Thr	Ser 75	Ala	Ser	Ala	Ala	Tyr 80
Met	Glu	Leu	Ser	Ser 85	Leu	Gly	Ser	Glu	Asp 90	Thr	Ala	Leu	Tyr	Tyr 95	Cys
Ala	Arg	Ala	Thr 100	Tyr	Asp	Pro	Leu	Thr 105	Gly	Tyr	Ser	Phe	Asp 110	Gly	Phe
Asp	Ile	Trp 115	Gly	Gln	Gly	Thr	Met 120	Val	Thr	Val	Ser	Ser 125	Gly	G1y	Gly
Gly	Ser 130	Gly	Gly	Gly	Gly	Ser 135	Gly	Gly	Gly	Gly	Ser 140	Gln	Ser	Val	Leu
Thr 145	Gln	Pro	Ala	Ser	Val 150	Ser	Gly	Ser	Pro	Gly 155	Gln	Ser	Ile	Thr	Ile 160
Ser	Cys	Thr	Gly	Thr 165	Ser	Ser	qaA	Val	Gly 170	Gly	Tyr	Asn	Tyr	Val 175	Ser
Trp	Tyr	Gln	Gln 180	His	Pro	Gly	Lys	Ala 185	Pro	Lys	Leu	Met	Ile 190	Tyr	Glu
Gly	Ser	Lys 195	Arg	Pro	Ser	Gly	Val 200	Ser	Asn	Arg	Phe	Ser 205	Gly	Ser	Lys
Ser	Gly 210	Asn	Thr	Ala	Ser	Leu 215	Thr	Ile	Ser	Gly	Leu 220	Gln	Ala	Glu	Asp
Glu 225	Ala	Asp	.Tyr	Tyr	Сув 230	Ser	Ser	Tyr	Thr	Thr 235	Arg	Ser	Thr	Arg	Val 240
Phe	Gly	Gly	Gly	Thr 245	Lys	Leu	Thr	Val	Leu 250	Gly					

<210> 1826

<211> 245 <212> PRT

<213> Homo sapiens

<400> 1826

Gln 1	Val	Gln	Leu	Val 5	Gln	Ser	Gly	Gly	Gly 10	Leu	Val	Gln	Pro	Gly 15	Gly
ser	Leu	Arg	Leu 20	Ser	Cys	Ala	Ala	Ser 25	Gly	Phe	Ser	Phe	Ser 30	Ser	His
Ser	Met	Asn 35	Trp	Val	Arg	Gln	Ala 40	Pro	Gly	Lys	Gly	Leu 45	Glu	Trp	Val
Ser	Tyr 50	Ile	Asp	Ser	Ser	Ser 55	Ser	Thr	Ile	His	Tyr 60	Ala	Asp	Ser	Val
Lys 65	Gly	Arg	Phe	Ile	Ile 70	Ser	Arg	Asp	Asn	Ala 75	Lys	Asn	Ser	Leu	Tyr 80
Leu	Gln	Met	Asn	Ser 85	Leu	Arg	Ala	Glu	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys
Ala	Ser	Thr	Tyr 100	Tyr	Asp	Ile	Leu	Thr 105	Gly	Tyr	Tyr	Phe	Asp 110	Tyr	Trp
Gly	Gln	Gly 115	Thr	Leu	Val	Thr	Val 120	Ser	Ser	Gly	Gly	Gly 125	Gly	Ser	Gly
Gly	Gly 130	Glγ	Ser	Gly	Gly	Gly 135	Gly	Ser	Ser	Glu	Leu 140	Thr	Gln	Asp	Pro
Ala 145	Val	Ser	Val	Ala	Leu 150	Gly	Gln	Thr	Val	Arg 155	Ile	Thr	Cys	Gln	Gly 160
Asp	Ser	Leu	Arg	Ser 165	Tyr	Tyr	Ala	Ser	Trp 170	Tyr	Gln	Gln	Lys	Pro 175	Gly
Gln	Ala	Pro	Val 180	Leu	Val	Ile	Tyr	Gly 185	Lys	Asn	Asn	Arg	Pro 190	Ser	Gly
Ile	Pro	Asp 195	Arg	Phe	ser	Gly	Ser 200	Ser	Ser	Gly	Asn	Thr 205	Ala	Ser	Leu
Thr	Ile 210	Thr	Gĺy	Ala	Gln	Ala 215	Glu	Asp	Glu	Ala	Asp 220	Tyr	Tyr	Cys	Asn
Ser 225	Arg	Asp	Ser	Ser	Gly 230	Asn	His	val	Val	Phe 235	Gly	Gly	Gly	Thr	Lys 240
								2	175						

Leu Thr Val Leu Gly 245

<210> 1827 <211> 251

<212> PRT

<213> Homo sapiens

<400> 1827

Gly Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 \$40\$

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe  $_{\rm 50}$ 

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr  $65 \phantom{000} 70 \phantom{000} 75 \phantom{000} . \phantom{000} 80$ 

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys \$85\$ 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe 100 105 110

Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Gly Gly Gly Ser Gln Ser Val Leu 130 \$135\$

Thr Gln Pro Ala Ser Met Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 \$150\$

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 170 175

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu  $180 \hspace{1cm} 185 \hspace{1cm} 190$ 

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235 240

Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg

<210> 1828

<211> 255

<212> PRT <213> Homo sapiens

<400> 1828

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser

Ser Val Lys Val Ser Cys Lys Val Ser Gly Gly Thr Phe Ser Ser Tyr 20 25 30

Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 \$40\$

Gly Arg Ile Ile Pro Ile His Gly Ile Val Asn His Ala Glu Lys Phe 50 55 60

Gln Gly Arg Ala Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{0.5cm} 90 \hspace{0.5cm} 95$ 

Ala Arg Leu Pro Pro Tyr Asp Met Leu Thr Gly Tyr Tyr Val Gly Gly 100  $$105\$ 

Gly Met Asp Val Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln 130 135 140

Ala Val Leu Thr Gln Pro Ser Ser Val Ser Gly Ala Pro Gly Gln Arg

145 150 155 160

Val Thr Ile Ser Cys Thr Gly Ser Arg Ser Asn Ile Gly Ala Gly Phe 165 170 175

Asp Ile His Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu 180  $$185\ \ ]$ 

Ile Tyr Ser Asn Asp Ile Arg Pro Ser Gly Val Pro Asp Arg Phe Ser 195  $200\,$  205

Gly Ser Arg Ser Gly Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln 210 215 220

Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Ser Ser Leu 225 230 235 240

Ser Gly Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu Gly 245 250 255

<210> 1829

<211> 253

<212> PRT <213> Homo sapiens

-400× 1829

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 10 15

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Thr Leu Thr Ser Tyr  $\phantom{-}20\phantom{+}25\phantom{+}$ 

Thr Ile Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35  $$40\$ 

Gly Gly Ile Ile Pro Arg Phe Asp Ala Ala Asp Tyr Ala Gln Lys Phe  $_{50}$ 

Gln Gly Arg Leu Thr Ile Ala Ala Asp Glu Leu Thr Asn Thr Val His 65 70 75 80

Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Thr Gly Val Tyr Phe Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Ala Lys Pro Tyr Thr Asp Phe Ser Arg Gly Ser Asp Ala Asp 100 105 110

Ala Phe Asp Val Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Leu 130 140

Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln 145 150 155 160

Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala  $_{\rm 165}$   $_{\rm 170}$ 

Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr  $180 \,$   $185 \,$   $190 \,$ 

Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser 195  $200\,$  205

Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu 210 215 220

Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His 225 230 235 240

Leu Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1830

<211> 242

<212> PRT

<213> Homo sapiens

<400> 1830

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Val Ser Ser Arg

Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 \$40\$

Gly Ser Leu Pro Pro Ser Gly Ala Pro Ile Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Ala Ile Thr Ala Asp Ala Leu Thr Asn Thr Ala Phe 65 70 Met Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys 90 85 Ala Arg Asp Gln Gly Arg Tyr Leu Asp Leu Trp Gly Lys Gly Thr Leu 105 Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Val Ala Pro Gly Gln Thr Ala Arg Ile Ala Cys Gly Gly Asn Asn Ile 150 Gly Ser Gln Ala Val His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Val Tyr Asp Asp Ser Asp Arg Pro Ser Gly Ile Pro Glu 185 Arg Ile Ser Gly Ser Lys Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser 200 Arg Val Glu Ala Gly Asp Glu Ala Asp Phe Tyr Cys Gln Val Trp Asp 215 Gly Ser Ser Asp His Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val 235 225 230 Leu Gly <210> 1831 <211> 251 <212> PRT <213> Homo sapiens Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr Ala Phe Asn Trp Val Arg Arg Ala Pro Gly Gln Gly Leu Glu Trp Leu Gly Ser Ile Val Pro Val Phe Asn Thr Lys Thr Phe Ala Arg Lys Phe Gln Gly Arg Val Thr Leu Thr Ala Asp Glu Leu Thr Arg Thr Ala Tyr Leu Glu Leu Ser Asn Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Ser Arg Tyr Gly Asp Pro Phe Tyr Tyr Tyr Tyr Tyr Met Asn Val Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ala Val Leu Thr Gln Pro Ser Ser Val Ser Gly Ala Pro Gly Gln Arg Val Thr Ile Ser Cys Thr Gly Ser Ser Ser Asn Ile Gly Lys Gly Tyr Asp Val His Trp Tyr Gln Gln Leu Pro Gly Lys Ala Pro Lys Leu Leu Met Tyr Asp Asn Asn Asn Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Ser Asn Leu Ser Gly Tyr Val Phe Gly Thr Gly Thr Gln Leu Thr Val Leu Ser 

<211 <212	)> 18 L> 25 2> PF 3> Ho	i ET	apie	ens											
	)> 18 Val		Leu	Val 5	Gln	Ser	Gly	Ala	Glu 10	Val	Гув	Lys	Pro	Gly 15	Ser
Ser	Val	Lys	Val 20	Ser	Cys	Arg	Ala	Ser 25	Gly	Gly	Ser	Phe	Asn 30	His	Ala
Ile	Ser	Trp 35	Val	Arg	Gln	Ala	Pro 40	Gly	Arg	Gly	Leu	Glu 45	Trp	Met	Gly
Gly	Ile 50	Leu	Pro	Met	Tyr	Gly 55	Thr	Ala	Asn	Tyr	Ala 60	Gln	Lys	Phe	Gln
Gly 65	Arg	Val.	Thr	Ile	Thr 70	Ala	Asp	Lys	Leu	Thr 75	Asn	Thr	Val	Tyr	Met 80
Asp	Leu	Ser	Arg	Leu 85	Arg	Tyr	Glu	Asp	Thr 90	Ala	Val	Tyr	Tyr	Cys 95	Ala
Arg	Glu	Leu	Gly 100	Leu	Ser	Ile	Val	Gly 105	Ala	Thr	Thr	Gly	Ala 110	Leu	Asp
Met	Trp	Gly 115	Arg	Gly	Thr	Leu	Val 120		Val	Ser	Ser	Gly 125	Gly	Gly	Gly
Ser	Gly 130	Gly	Gly	Gly	Ser	Gly 135	Gly	Gly	Gly	Ser	Ala 140	Gln	Ser	Val	Leu
Thr 145	Gln	Pro	Pro	Ser	Ala 150	Ser	Gly	Thr	Pro	Gly 155	Gln	Arg	Val	Thr	Ile 160
Ser	Cys	Ser	Gly	Ser 165	Ser	Ser	Asn	Ile	Gly 170	Ser	Asn	Thr	Val	Asn 175	Trp
Tyr	Gln	Gln	Leu 180	Pro	Gly	Thr	Ala	Pro 185	Lys	Leu	Leu	Ile	Tyr 190	Ser	Asn

Asn Arg Arg Pro Ser Gly Val Pro Glu Arg Phe Ser Gly Ser Lys Ser 195 200 205 .

Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln Pro Glu Asp Glu 210 215 220

Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu Lys Gly Trp Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1833

<211> 251 <212> PRT

<213> Homo sapiens

<400> 1833

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1  $\phantom{-}$  5  $\phantom{-}$  10  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Thr Phe Ser Gly Tyr  $\phantom{\bigg|}20\phantom{\bigg|}25\phantom{\bigg|}$ 

Thr Val Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr 65 70 75 80

Leu Asp Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys \$85\$ 90 95

Ala Arg Gly Gly Tyr Asp Ile Leu Thr Gln Tyr Pro Ala Glu Phe Phe  $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

His Pro Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser Ala Leu Ser Ser 130 135 140

Glú Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val 145 150 155 160

Thr Ile Thr Cys Gln Gly Asp Ser Val Arg Asn Phe Tyr Ala Ser Trp

165 170 175

Tyr Gln Gln Lys Pro Gly Gln Ala Pro Leu Leu Val Ile Tyr Gly Gln 180 185 190

Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Arg Ser

Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu 210 215 220

Gly Val Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Thr Asn Pro Val Val 225 230 235

Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly

<210> 1834

<211> 246 <212> PRT

<213> Homo sapiens

<400> 1834

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Val Ser Ser Arg \$20\$

Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ 40 \ \ 45$ 

Gln Gly Arg Val Ala Ile Thr Ala Asp Ala Leu Thr Asn Thr Ala Phe 65 70 75 80

Met Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Gln Gly Arg Tyr Leu Asp Leu Trp Asp Gln Gly Thr Leu 100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly 115 120 125

Gly Gly Ser Ala Gln Ala Val Leu Thr Gln Pro Ser Ser Val Ser 130 135

Gly Ala Pro Gly Gln Arg Val Thr Ile Ser Cys Thr Gly Ser Ser Ser 145 \$150\$

Asn Ile Gly Ala Gly Tyr Asp Val His Trp Tyr Gln His Leu Pro Gly \$165\$

Thr Ala Pro Lys Leu Leu Ile Tyr Gly Asn Lys Asn Arg Pro Ser Glu 180 185 190

Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu 195 200 205

Ala Ile Thr Gly Leu Gln Pro Glu Asp Glu Ala Asp Tyr Tyr Cys Gln 210  $\,$  220  $\,$ 

Ser Tyr Asp Ser Ser Leu Ser Gly Pro Val Ala Phe Gly Gly Gly Thr 225 \$230 \$235

Lys Val Thr Val Leu Gly 245

<210> 1835 <211> 253 <212> PRT <213> Homo sapiens

CZIJS HOMO BADICH

<400 1835 Qlu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Ile Gln Pro Gly Gly 1 5 , 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Leu Asn Asn Phe \$20\$

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val \$35\$ 40 45

Ser Tyr Ile Ser Tyr Ser Ser Ser Thr Lys Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Ile Gly Lys Asn Ser Leu Tyr 65 70 75 80

Leu Gln Met Asn Asn Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Arg Tyr Tyr Asp Ile Leu Thr Lys Gly Asp Tyr Tyr Tyr 100 105 110

Gly Met Asp Val Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu  $130\,$ 

Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}$ 

Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala 165 170 175 .

Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr 180 185 190

Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser 195  $200\,$ 

Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu 210 215 220

Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn Leu 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$  240

Val Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly 245 250

<210> 1836

<211> 262

<212> PRT

<213> Homo sapiens

<400> 1836

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ala Ala Asn 20 25 30

Tyr	Ile	His 35	Trp	Val	Arg	Gln	Ala 40	Pro	Gly	Gln	Gly	Leu 45	Glu	Trp	Met
Gly	Trp 50	Ile	Asn	Pro	Asn	Thr 55	Gly	Ala	Thr	Lys	Phe 60	Ser	Arg	Lys	Phe
Glu 65	Gly	Arg	Val	Thr	Met 70	Thr	Arg	Asp	Thr	Ser 75	Ile	Thr	Thr	Val	Tyr 80
Met	Asp	Leu	Asn	Arg 85	Val	Arg	Phe	Asp	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys
Ala	Arg	Val	Gln 100	Gly	Glu	Thr	Tyr	Tyr 105	Авр	Ile	Leu	Thr	Gly 110	Tyr	Trp
Gly	Pro	Lys 115	Arg	Asp	Leu	Tyr	Gly 120	Met	Asp	Val	Trp	Gly 125	Arg	Gly	Thr
Met	Val 130	Thr	Val	Ser	Ser	Gly 135	Gly	Gly	Gly	Ser	Gly 140	Gly	Gly	Gly	Ser
Gly 145	Gly	Gly	Gly	Ser	Ala 150	Gln	Ala	Val	Leu	Thr 155	Gln	Pro	Ser	Ser	Val 160
Ser	Gly	Ala	Pro	Gly 165	Gln	Arg	Val	Thr	Ile 170	Ser	Сув	Thr	Gly	Ser 175	Asn
Ser	Asn	Ile	Gly 180	Ala	Gly	Tyr	Asp	Val 185	His	Trp	Tyr	Gln	Gln 190	Leu	Pro
Gly	Thr	Ala 195	Pro	Lys	Leu	Leu	Ile 200	Tyr	Asn	Asp	Ser	Asn 205	Arg	Pro	Ser
	Val 210	Pro	Asp	Arg	Phe	Ser 215	Gly	Ser	Lys	Ser	Gly 220	Thr	Ser	Ala	Ser
Leu 225	Ala	Ile	Thr	Gly	Leu 230	Gln	Ala	Glu	Asp	Glu 235	Ala	His	Tyr	Tyr	Cys 240
Gln	Ser	Tyr	Asp	Asn 245	Ser	Leu	Ser	Ala	Ser 250	Ile	Phe	Gly	Gly	Gly 255	Thr
	_	ml	11- 7	T	a1.										

Lys Leu Thr Val Leu Gly 260

<210> 1837 <211> 251 <212> PRT <213> Homo sapiens <400> 1837 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 10 Ser Val Lvs Val Ser Cvs Lvs Ala Ser Glv Glv Ser Phe Asn His Ala 20 25 Ile Ile Cys Trp Leu Gln Ala Pro Gly Arg Gly Leu Glu Trp Met Val 40 Gly Ile Leu Pro Met Tyr Gly Thr Ala Asn Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Leu Ala Ile Thr Ala Tyr Met Asp Leu Ile Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys Ala 90 Arg Glu Leu Gly Leu Ser Ile Val Val Ala Thr Thr Gly Ala Leu Asp 100 105 Met Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln Ser Val Val 135 Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln Lys Val Ile Ile 145 Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Thr Asn Ser Val Ser Trp 170 165

Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Asp Asn 180 185 190

Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser 195 200 205

Gly Thr Ser Ala Thr Leu Gly Ile Thr Gly Leu Gln Ser Gly Asp Glu 210 215 220

Ala Asp Tyr Tyr Cys Gly Thr Arg Asp Ser Ser Leu Ser Ala Val 225 230 235

Phe Gly Gly Gly Thr Gln Leu Thr Val Leu Ser 245 250

<210> 1838

. <211> 249

<212> PRT

<213> Homo sapiens

<400> 1838

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Asn Asn Phe 20 25 30

Ala Phe Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Gly Ile Thr Pro Leu Phe Gly Thr Pro Asn Tyr Ala Glu Arg Leu 50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Val Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Glu Ser Glu Gly Gly Asp Tyr Thr Asn Pro Phe Gly Tyr Trp \$100\$

Gly Arg Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Ser Gly 115 \$120\$

Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln Ala Val Val Ile Gln 130 135 140

Glu Pro Ser Leu Thr Val Ser Pro Gly Gly Thr Val Thr Leu Thr Cys 145 150 150 160

Thr Ser Ser Thr Gly Ala Val Thr Asn Asn Asn Tyr Pro Ser Trp Phe

165 170 175

Gln Gln Lys Pro Gly Gln Ala Pro Arg Pro Leu Ile Ser Trp Thr Asn 180 185 190

Asn Arg Pro Ser Trp Thr Pro Ala Arg Phe Ser Ala Tyr Leu Leu Gly 195 . 200 205

Gly Lys Ala Val Leu Thr Leu Ser Gly Val Gln Pro Glu Asp Glu Ala 210 215 220

Glu Tyr Tyr Cys Leu Leu Tyr Ser Gly Asp Ala Gln Leu Val Phe Gly 225 \$230\$

Gly Gly Thr Lys Val Thr Val Leu Gly 245

<210> 1839

<211> 245 <212> PRT

<213> Homo sapiens

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Val Ser Ser Arg \$20\$

Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

Gly Gly Ser Leu Pro Pro Ser Gly Ala Pro Ile Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Val Ala Ile Thr Ala Asp Ala Leu Thr Asn Thr Ala Phe  $65 \ 70 \ 75 \ 80$ 

Met Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Gln Gly Arg Tyr Leu Asp Leu Trp Gly Lys Gly Thr Met 100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly 115 120 125

Gly Gly Gly Ser Ala Gln Ala Val Leu Thr Gln Pro Ser Ser Val Ser

Gly Ala Pro Gly Gln Arg Val Thr Ile Ser Cys Thr Gly Ser Ser Ser 145 \$150\$

Asn Ile Gly Ala Gly Tyr Asp Val His Trp Tyr Gln Gln Leu Pro Gly 165 \$170\$

Thr Ala Pro Lys Leu Leu Ile Tyr Gly Tyr Ile Asn Arg Pro Ser Gly
180 185 190

Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Lêu 195 200 205

Ala Ile Thr Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Gln 210 220

Ser Tyr Asp Thr Ser Leu Ser Asp Tyr Val Phe Gly Thr Gly Thr Lys  $225 \ \ 230 \ \ 235 \ \ 240$ 

Val Thr Val Leu Gly 245

<210> 1840 <211> 251 <212> PRT

<213> Homo sapiens

<400> 1840
Asp Val Gln Leu Leu Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn His Ala  $20 \\ 25 \\ 30$ 

Ile Ser Trp Leu Arg Gln Ala Pro Arg Arg Gly Leu Glu Trp Met Gly 35 40 45

Gly Ile Leu Pro Met Tyr Gly Thr Ala Tyr Tyr Ala Gln Lys Phe Gln 50 55 60

Gly Arg Val Thr Ile Thr Ala Asp Lys Leu Thr Asn Thr Val Tyr Met 65 70 75 80

Asp Leu Ser Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys Ala 85 Arg Glu Leu Gly Leu Ser Ile Val Gly Ala Thr Thr Gly Ala Leu Asp 105 100 Met Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser Val Val Thr Gln Pro Pro Ala Val Ser Ala Ala Pro Gly Gln Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Tyr Tyr Val Ser Trp 170 Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Asp Asn Asp Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Val Ser Lys Ser 205 195 200 Gly Thr Ser Ser Thr Leu Ala Ile Thr Gly Leu Gln Thr Gly Asp Glu 210 215 Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Ser Ser Leu Ser Ala Gly Val 225 230 235 240 Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly 245 <210> 1841 <211> 258 <212> PRT <213> Homo sapiens <400> 1841 Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu Val Lys Pro Gly Gly 1.0 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Gly Tyr

Ser Met Asn Trp Val Arg Leu Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 Ala Ser Ile Arg Ser Arg Ser Gly Gly Thr Tyr Ile Tyr Tyr Ala Asp 50 55 60 Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser 65 7.0 75 Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr 85 90 95 Tyr Cys Ala Arg Asp Pro Gly Asn Tyr Asp Ile Leu Thr Gly Tyr Tyr 100 105 Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Leu Val Thr Val 120 115 Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly 130 135 140 Ser Ala Gln Ala Val Leu Thr Gln Pro Ser Ser Val Ser Gly Ala Pro 150 155 Gly Gln Arg Val Thr Ile Pro Cys Thr Gly Ser Ser Ser Asn Ile Arg 165 170 Ala Gly Tyr Asp Val His Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro 180 Arg Leu Leu Ile Tyr Gly Asn Ser Asn Arg Pro Ser Gly Val Pro Asp 200 205 Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Thr 215

Thr Asn Leu Ser Gly Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val \$245\$ . \$250\$

Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp

230

Leu Gly

235 . 240

<210> 1842 <211> 244 <212> PRT

<213> Homo sapiens

<400> 1842

Glu Val Gln Leu Val Gln Ser Gly Ser Glu Val Glu Lys Pro Gly Ser

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser His 20 25 30

Ala Leu Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Tyr Met 35  $\phantom{\bigg|}40\phantom{\bigg|}45\phantom{\bigg|}$ 

Gly Gly Ile Met Pro Gly Phe Gly Lys Ser Ser Tyr Ala Pro Lys Phe 50 60

Leu Gly Arg Leu Thr Ile Thr Ala Asp Asp Leu Thr Asn Thr Gly Tyr  $^{65}$  70 75 80

Met Glu Leu Thr Ser Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Thr Val Arg Leu Pro His His His Tyr Phe Met Ala Val Trp Gly 100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Ser Ala Gln Ser Val Leu Thr Gln Pro 130 140

Pro Ser Val Ser Val Ser Pro Gly Gln Thr Ala Ile Ile Thr Cys Ser

Gly Asn Lys Leu Gly Asn Lys Tyr Ala Thr Trp Tyr Gln Gln Lys Pro \$165\$ \$170\$

Gly Gln Pro Pro Val Ala Val Ile Tyr Glu Asp Asn Lys Arg Pro Ser 180 185 190

Gly Ile Pro Glu Arg Phe Ser Gly Ser Asn Ser Gly Asp Thr Ala Thr 195 200 205

Leu Thr Ile Ser Gly Thr Gln Ala Met Asp Glu Ala Asp Tyr Tyr Cys 210 215 220

Gln Ala Trp Asp Ser Asp Thr Val Val Phe Gly Gly Gly Thr Lys Val 225  $\phantom{\bigg|}230\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Thr Val Leu Gly

<210> 1843

<211> 254

<212> PRT

<213> Homo sapiens

<400> 1843

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Thr Ala Ser Gly Gly Ile Phe Ser Ser Ser 20 25 30

Thr Phe Ser Trp Val Arg Gln Val Pro Gly Gln Gly Leu Glu Trp Leu 35 40 45

Gly Gly Ile Thr Pro Met Phe Ala Lys Ala Asp Tyr Ala Gln Lys Phe  $50 \hspace{1cm} 55 \hspace{1cm} 60$ 

Gln Gly Arg Val Ala Ile Thr Ala Asp Glu Leu Thr Arg Thr Val Tyr 65 70 75 80

Met Asp Leu Ser Gly Leu Arg Pro Glu Asp Thr Ala Ile Tyr Tyr Cys 85 90 95

Ala Arg Glu Ser Ser Ile Thr Val Asn Pro Pro Tyr Tyr Phe Tyr Gly

Met Asp Val Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly
115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Leu Ser 130 135 140

Tyr Val Leu Thr Gln Pro Pro Ser Val Ser Lys Gly Leu Arg Gln Thr 145 150 155 160

Ala Thr Leu Thr Cys Thr Ala Asn Thr Asn Asn Val Gly Ser His Gly

165 170 175

Ala Thr Trp Leu Gln His Arg Gln Gly His Pro Leu Lys Leu Leu Val

Tyr Arg Asp Glu Lys Arg Pro Ser Gly Ile Ser Glu Arg Leu Ser Ala 195 200 205

Ser Arg Ser Gly Asp Thr Ala Ser Leu Thr Ile Thr Gly Leu Gln Pro 210  $$^{\circ}$$  220

Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Ser Gly Leu Ser 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$  240

Ala Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1844

<211> 242

<212> PRT

<213> Homo sapiens

<400> 1844

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Val Ser Ser Arg  $20 \\ 25 \\ 30$ 

Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Gly Ser Leu Pro Pro Ser Gly Ala Pro Ile Tyr Ala Gln Lys Phe 50 55 60

Gln Gly Arg Val Ala Ile Thr Ala Asp Ala Leu Thr Asn Thr Ala Phe 65 70 75 80

Met Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Gln Gly Arg Tyr Leu Asp Leu Trp Gly Lys Gly Thr Leu
100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly 115 120 125

Gly Gly Gly Ser Ala Leu Glu Thr Thr Leu Thr Gln Ser Pro Ala Thr 135 Leu Ser Val Ser Pro Gly Glu Ser Ala Thr Leu Ser Cys Arg Ala Ser 150 155 Gln Ser Phe Ser Asn Asn Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln 170 Gly Pro Arg Leu Leu Ile Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile 180 Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr 195 Ile Ile Ser Leu Gln Ser Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln 210 215 Tyr Tyr Asp Trp Pro Ile Thr Phe Gly Arg Gly Thr Arg Leu Glu Ile 225 230 235 240 Lys Arg <210> 1845 <211> 244 <212> PRT <213> Homo sapiens <400> 1845 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Val Ser Ser Arg 20 25 3.0 Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45 Gly Gly Ser Leu Pro Pro Ser Gly Ala Pro Ile Tyr Ala Gln Lys Phe

Gln Gly Arg Val Ala Ile Thr Ala Asp Ala Leu Thr Asn Thr Ala Phe 65 70 75 80

55

50

Met Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arq Asp Gln Gly Arg Tyr Leu Asp Leu Trp Gly Arg Gly Thr Leu 105 110 Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly 120 115 Gly Gly Gly Ser Ala Leu Ser Tyr Val Leu Thr Gln Pro Pro Ser Ala 135 140 Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Ser 155 150 Ser Asn Leu Gly Ile Asn Thr Val Asn Trp Tyr Gln Gln Val Pro Gly 165 170 Thr Ala Pro Lys Leu Leu Ile Tyr Ser Asp His Gln Arg Pro Ser Gly 185 Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Ala Thr Ser Ala Ser Leu 200 195 Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala 210 215 220 Ala Trp Asp Asp Ser Leu Asn Gly Val Phe Gly Gly Gly Thr Lys Leu 230 235 225 Thr Val Leu Gly <210> 1846 <211> 254 <212> PRT <213> Homo sapiens

<400> 1846

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Leu Lys Lys Pro Gly Ala 1 10

Ser Val Lys Val Ser Cys Gln Ala Ser Gly Tyr Thr Ile Thr Gly Tyr 2.0 25 30

Tyr Val His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$ . \$40\$

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Asn Ser Ala Tyr 65 70 75 80

Met Glu Leu Thr Arg Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 . 95

Ala Arg Ser Pro Glu Gly Asp Tyr Gln Pro Leu Ser Ser Asn Tyr Asn 100 \$105\$

Trp Leu Asp Pro Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly \$115\$

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln 130 \$135\$

Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg 145  $\phantom{\bigg|}150\phantom{\bigg|}$ 

Val Thr Ile Ser Cys Ser Gly Ser Asp Ser Asn Ile Gly Ser Tyr Ala 165 170 175

Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Met 180 \$185\$

Ser Ser Asn Ser His Arg Ser Ser Gly Val Pro Asp Arg Phe Ser Gly 195 200 205

Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Thr Leu Ser 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$  . 240

Gly Arg Val Phe Gly Gly Gly Thr Gln Leu Ala Val Leu Ser

<210> 1847 <211> 246

<212> PRT

<213> Homo sapiens

<400> 1847

Gln Leu Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Arg Pro Ser Gly
1 5 10 15

Thr Leu Ser Leu Ala Cys Ser Val Ser Gly Asp Ser Ile Ser Asn Asn 20 25 30

Asn Trp Trp Thr Trp Val Arg Gln Ser Pro Arg Lys Gly Leu Glu Trp 35 40 45

Ile Gly Glu Ile Asn His Ser Gly Thr Thr Asn Tyr Asn Pro Ser Leu 50 55 60

Lys Thr Arg Val Ser Ile Ser Ala Asp Arg Ser Arg Asp His Leu Ser 65 70 75 80

Leu Glu Leu Lys Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Phe Cys  $85 \hspace{0.25in} 90 \hspace{0.25in} 95$ 

Ala Thr Gly Lys Glu Gly Tyr Asn Asp Asn Trp Gly Arg Gly Thr Met 100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly 115 120 125

Gly Gly Ser Ala Gln Ala Val Leu Thr Gln Pro Ser Ser Val Ser 130 135 140

Gly Ala Pro Gly Gln Arg Val Thr Ile Ser Cys Thr Gly Ser Ser Ser 145 \$150\$

Asn Ile Gly Ala Asp Tyr Asp Val·His Trp Tyr Gln Gln Leu Pro Gly
165 170 175

Thr Ala Pro Arg Leu Leu Ile Tyr Gly Asn Asn Asn Arg Pro Ser Gly
180 185 190

Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu 195 200 205

Ala Ile Thr Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Gln 210 215 220

Ser Tyr Asp Ser Ser Leu Ser Gly Ser Arg Val Phe Gly Thr Gly Thr 225 230 235 240

Lys Leu Thr Val Leu Gly

<210> 1848

<211> 253

<212> PRT <213> Homo sapiens

<400> 1848

Glu Val Gln Leu Val Gln Ser Gly Ala Asp Val Arg Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Asn Phe Met Asn Tyr 20 25 30

Asp Ile Asn Trp Val Arg Gln Ala Pro Gly Glu Gly Leu Glu Trp Met 35  $$40\$ 

Gly Trp Met Asn Pro Lys Ser Gly Lys Thr Asp Ser Ala Glu Lys Phe  $50 \,\,$ 

Glu Gly Arg Val Thr Met Thr Thr Asp Thr Ser Arg Asp Thr Val Tyr 65 70 80

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Phe Cys  $85 \hspace{0.5cm} 90 \hspace{0.5cm} 95 \hspace{0.5cm}$ 

Ala Arg Gly Ser Gly Tyr Asp Leu Leu Thr Gly Tyr Phe Thr Gly Ser

Pro Leu Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu 130 135 140

Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}$ 

Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Lys Tyr Tyr Glu 165 170 175

Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Ile Leu Leu Tyr

180 185 190

Tyr Lys Asn Gly Arg Pro Ser Gly Met Pro Asp Arg Phe Ser Ala Ser 195 200 205

Arg Ser Gly Asn Thr Ala Thr Leu Thr Ile Thr Gly Ala Gln Ala Glu 210 215 220

Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Asn Ser Gly Thr Asp 225 230 235

Leu Ile Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1849

<211> 255 <212>, PRT

<213> Homo sapiens

<400> 1849

Gln Met Gln Leu Val Gln Ser Gly Ala Glu Leu Lys Lys Pro Gly Ala 1 15 10

Ser Val Lys Val Ser Cys Gln Ala Ser Gly Tyr Thr Ile Thr Gly Tyr  $\phantom{-}20\phantom{+}25\phantom{+}25\phantom{+}$ 

Tyr val His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Trp Ile Asn Pro Ser Thr Gly Gly Thr Lys Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Asn Ser Ala Tyr 65 70 75 80

Met Glu Leu Thr Arg Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys \$85\$ 90 95

Ala Gly Ser Pro Glu Gly Asp Tyr Gln Pro Leu Ser Ser Asn Tyr Asn 100 105 110

Trp Leu Asp Pro Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln 130 140

Ala Val Leu Thr Gln Pro Ser Ser Val Ser Gly Ala Pro Gly Gln Arg 150 155 160 145 Val Thr Ile Ser Cys Thr Gly Ser Thr Thr Asn Ile Gly Ala Gly Phe 165 170 1.75 Ala Val His Trp Tyr Gln Gln Leu Pro Gly Ala Ala Pro Lys Leu Ile 180 185 190 Ile Tyr Gly Asn Arg Asn Arg Pro Ser Gly Val Pro Asp Arg Phe Ser 195 200 205 Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln 210 215 220 Ser Gly Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu 225 230 235 Lys Ala Val Val Phe Gly Gly Gly Thr Gln Leu Thr Val Leu Ser 245 250 <210> 1850 <211> 253 <212> PRT <213> Homo sapiens <400> 1850 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Leu Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 Gly Leu His Trp Val Arq Gln Thr Pro Gly Gln Gly Leu Glu Trp Leu 40 Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Tyr Tyr Ser Gln Lys Leu 55 60 -Gln Asp Arg Val Thr Leu Thr Thr Asp Thr Ser Thr Ser Thr Val Ser 75 70

2203

Met Glu Leu Arg Gly Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys

Ala Arg Met Gly His Tyr Asp Ile Leu Thr Gly Tyr Arg His Tyr Gly 100 105 Met Asp Val Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly 120 115 Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ala 135 Val Leu Thr Gln Pro Ser Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Gly Gly Ser Asn Ile Gly Ser Asn Ser Ala Asn Trp Tyr Arg Gln Val Pro Gly Ala Ala Pro Glu Leu Val Ile Tyr 185 Ser Asn Asn Gln Arg Pro Ser Ala Val Pro Asp Arg Phe Ser Gly Ser 200 Lys Ser Gly Thr Ser Ala Ser Leu Val Ile Arg Gly Leu Arg Ser Glu Asp Glu Ala Glu Tyr Tyr Cys Ala Thr Trp Asp Asp Ser Leu Arg Gly 225 230 235 Val Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly 245 <210> 1851 <211> 250 <212> PRT <213> Homo sapiens <400> 1851 Gln Val Gln Leu Gln Glu Ser Gly Gly Asp Leu Val Gln Pro Gly Gly . 5 1.0 Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Phe Thr Phe Ser Ser Tyr 25 Trp Met Tyr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Val Trp Val

2204

Ser Arg Ile Lys Ser Asp Gly Ser Gly Thr Glu Tyr Glu Asp Ser Val 50 55 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met Lys Ser Leu Arg Thr Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 Ala Arg Gly Asn Tyr Asp Ile Leu Thr Gly Tyr Pro His Asp Leu Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Ser Gly 120 115 Gly Gly Gly Ser Gly Gly Gly Ser Ala Leu Ser Tyr Glu Leu Thr 135 Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Ile Ser Asn Ile Gly Ser Asn Ile Val Asn Trp Tyr 1.65 170 Gln Gln Phe Pro Gly Met Ala Pro Lys Ile Leu Ile Gln Asn Asn Ser 1.85 180 Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly 200 Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala 210 215 Gln Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu Asn Gly Arg Val Phe 230 235 Gly Thr Gly Thr Lys Val Thr Val Leu Gly 250 245

<sup>&</sup>lt;210> 1852 <211> 252

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

Tallet Heme Day

<sup>... ....</sup> 

Gln Val Gln Leu Val Gln Ser Gly Pro Glu Val Lys Lys Pro Gly Ala

10 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Ser Thr His Gly Ile Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Trp Ile Ser Gly Tyr Asn Gly Asn Thr Asn Phe Ala Gln Lys Val 55 Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Phe Cys 85 Ala Arg Ser Tyr Tyr Asp Ile Leu Thr Gly Tyr Tyr His Thr Pro Leu 105 100 Asp Tyr Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Arg Arg Val Thr Ile Ser Cys Ser Gly Asn Asp Ser Asn Val Ala Arq Asn Ser Val Asn 165 170 175 Trp Tyr Gln Gln Leu Pro Gly Ala Ala Pro Lys Leu Leu Ile Tyr Ser Asp Asp Arg Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys 195 200 205 Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp 210 215 220

235 240

Glu Ala His Tyr Tyr Cys Gly Ala Trp Asp Asp Ser Leu Ser Gly Leu

Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly

<210> 1853

<211> 253 <212> PRT

<213> Homo sapiens

<400> 1853

Gln Val Gln Leu Val Gln Ser Gly Ala Asp Val Lys Lys Pro Gly Ala 1  $\phantom{0}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Asn Phe Met Asn Tyr 20 25 30

Asp Ile Asn Trp Val Arg Gln Ala Pro Gly Glu Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45 \hspace{1cm}$ 

Gly Trp Met Asn Pro Lys Ser Gly Lys Ser Asp Ser Ala Glu Lys Phe 50 55 60

Glu Gly Arg Val Thr Met Thr Thr Asp Thr Ser Arg Asp Thr Val Tyr  $_{65}$   $\phantom{0}$  70  $\phantom{0}$  75  $\phantom{0}$  80

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Phe Cys \$85\$

Ala Arg Gly Ser Gly Tyr Asp Leu Leu Thr Gly Tyr Phe Thr Gly Ser 100  $\phantom{-}$  . 105

Pro Leu Asp Tyr Trp Gly Gln Gly Thr Léu Val Thr Val Ser Ser Gly 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Leu 130 140

Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln 145 150 150 160

Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Lys Tyr Tyr Thr  $_{165}$   $_{170}$   $_{170}$   $_{175}$ 

Asn Trp Phe Gln Gln Arg Pro Gly Gln Ala Pro Leu Leu Val Met Tyr  $180 \,$   $185 \,$   $190 \,$ 

Gly Gln His Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser

195 200 205

Arg Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Thr Gln Ala Glu 210 215 220

Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Thr Val 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Leu Ile Phe Gly Gly Thr Lys Leu Thr Val Leu Gly \$245\$

<210> 1854

<211> 254 <212> PRT

<213> Homo sapiens

<400> 1854

Glu Val Gln Leu Val Gln Ala Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Thr Ala Lys Val Ser Cys Lys Thr Ser Gly Tyr Ser Phe Asp Asn Tyr \$20\$

Gly Ile Ala Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$

Gly Trp Ile Ser Ala Tyr Asp Gly Asp Arg Asn Tyr Ala Gln Lys Leu 50 60

Arg Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Pro Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Asp Asp Asp Ile Leu Thr Asn Tyr Tyr Leu Glu Tyr Phe  $100 \\ 0.05$ 

Gln His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln Ser Val

Leu Thr Gln Pro Pro Ser Val Ser Gly Ser Pro Gly Gln Ser Val Thr 145 \$150\$

Ile Ser Cys Ala Gly Thr Ser Ser Asn Ile Gly Pro Tyr Asn Tyr Val 165 170 175 Ser Trp Tyr Gln Gln His Pro Gly Gln Ala Pro Lys Leu Ile Ile Tyr 180 185 190 Glu Val Thr Lys Arg Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser 195 200 Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu Gln Ser Glu 220 Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Ser Ile Gly Asn Phe Asn Leu 225 230 235 240 Gly Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 , 250 <210> 1855 <211> 256 <212> PRT <213> Homo sapiens <400> 1855 Glu Val Gln Leu Val Gln Ser Gly Ala Asp Val Lys Lys Pro Gly Ala 1 5 10 Ser Val Lys Val Ser Cys Lys Thr Ser Gly Tyr Asn Phe Met Asn Tyr 20 25 Asp Ile Asn Trp Val Arg Gln Ala Pro Gly Glu Gly Leu Glu Trp Met Gly Trp Met Asn Pro Asn Ser Gly Lys Thr Asp Ser Ala Glu Lys Phe 50 Gln Gly Arg Val Thr Met Thr Thr Asp Ser Ser Arg Asp Thr Val Tyr 65 70 75 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Phe Cys

Ala Arg Gly Ser Gly Tyr Asp Val Leu Thr Gly Tyr Phe Thr Gly Ser 100 \$105\$

Pro Leu Asp Tyr Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly 115 120 Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln 135 Ser Val Leu Thr Gln Pro Pro Ser Val Ser Gly Thr Pro Gly Gln Arq Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn Phe 170 Val Ser Trp Tyr Gln Gln Phe Pro Gly Thr Ala Pro Lys Leu Leu Ile 185 Tyr Arg Asn Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly 200 Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln Val 215 Asp Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Ala Ser Leu Ser 235 225 Gly Arg Gly Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 250 <210> 1856 <211> 249 <212> PRT

<213> Homo sapiens

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 10 1

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 25 30 20

Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 40

Ser Ser Ile Ser Ser Ser Ser Tyr Ile Tyr Tyr Ala Asp Ser Val 50 55

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 70 65 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 Ala Arg Gly Arg Tyr Asp Ile Leu Thr Gly Tyr Phe Thr Ser Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 Ser Gly Gly Gly Ser Gly Gly Gly Ser Ala Leu Ser Ser Glu 135 Leu Thr Gin Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg 145 . 150 Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Ser Tyr Ala Ser Trp Tyr 165 170 Gln Gln Lys Pro Gly Gln Ala Pro Thr Leu Val Ile Phe Gly Lys Asn 185 180 Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly 200 Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala 210 215 Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn Leu Pro Phe Gly 230 235 Gly Gly Thr Lys Val Thr Val Leu Gly 245

<210> 1857 <211> 254

<212> PRT

<213> Homo sapiens

<400> 1857

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala

Thr Val Lys Val Ser Cys Lys Thr Ser Gly Tyr Ser Phe Asp Asn Tyr

. 30

Gly Ile Ala Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met ' 35 40 45

Gly Trp Ile Ser Ala Tyr Asp Gly Asp Arg Asn Tyr Ala Gln Lys Leu

25

20

Gly Trp Ile Ser Ala Tyr Asp Gly Asp Arg Asn Tyr Ala Gln Lys Leu 50 55 60

Arg Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr  $65 \hspace{1cm} 70 \hspace{1cm} 75 \hspace{1cm} 80 \hspace{1cm}$ 

Met Glu Leu Arg Ser Leu Arg Pro Asp Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{0.5cm} 90 \hspace{0.5cm} 95$ 

Ala Arg Asp Asp Arg Asp Ile Leu Thr Asn Tyr Tyr Leu Glu Tyr Phe \$100\$

Gln His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln Ser Val 130 135 140

Leu Thr Gln Pro Pro Ser Val Ser Gly Ser Pro Gly Gln Ser Val Thr 145 \$150\$

Ile Ser Cys Ala Gly Thr Ser Ser Asn Ile Gly Pro Tyr Asn Tyr Val 165 170 175

Ser Trp Tyr Gln Gln His Pro Gly Gln Ala Pro Lys Leu Ile Tyr 180 \$185\$ . . . . 190

Glu Val Thr Lys Arg Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser 195 200 205.

Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Ser Ile Gly Asn Phe Asn Leu 225 230 235 240

Gly Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly \$245\$

<210> 1858

<211> 253 <212> PRT

<213> Homo sapiens

<400> 1858

Gln Met Gln Leu Val Gln Ser Arg Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Glu Ala Ser Ala Glu Leu Phe Ala Ser Ser 20 25 30

Asp Ile Asn Trp Val Arg Arg Ala Thr Gly Gln Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gly Trp Val Asn Pro Ser Ser Gly Asn Ala Gly Tyr Ala Glu Lys Phe 50 60

Glu Gly Arg Val Ser Met Thr Thr Asn Ile Pro Lys Lys Thr Val Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$ 90 95

Ala Arg Gly Thr Gly Tyr Asp Ile Leu Thr Gly Tyr Tyr Met Gly Ser 100 105 110

Ala Phe Asp Gln Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu 130 135 140

Ser Ser Glu Leu Thr Gln Asp Pro Asp Val Ser Val Ala Leu Gly Gln 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  160

Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Pro 165 170 175

Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Phe 180 185 190

Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser 195 200 205

Ser Ser Gly Asn Thr Ala Phe Leu Thr Ile Thr Gly Ala Gln Ala Glu

210 215 220

Asp Glu Gly Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Thr Arg Ser His 225 230 235 240

Leu Val Phe Gly Gly Gly Thr Gln Leu Thr Val Leu Ser 245 . 250

<210> 1859

<211> 253 <212> PRT

<213> Homo sapiens

<400> 1859

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Gly Ile His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Leu  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Tyr Tyr Ser Gln Lys Leu 50 55 60

Gln Asp Arg Val Thr Leu Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys \$85\$ 90 95

Ala Arg Met Gly His Tyr Asp Ile Leu Thr Gly Tyr Arg His Tyr Gly 100 \$105\$

Met Asp Val Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly . 115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser 130 135 140

Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln Arg Val 145 150 150 160

Thr Ile Ser Cys Ser Gly Gly Ser Ser Asn Ile Gly Lys Asn Tyr Val

Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr 180 185

Asp Asn Tyr Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser 200

Lys Ser Ala Thr Ser Ala Thr Leu Gly Ile Thr Gly Leu Gln Thr Gly

Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Ser Ser Leu Ser Ala 230 235

Leu Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1860 <211> 245

<212> PRT

<213> Homo sapiens

<400> 1860

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 5 1.0

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Val Ser Ser Arg 2.0 25

Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 40

Gly Gly Ser Leu Pro Pro Ser Gly Ala Pro Ile Tyr Ala Gln Lys Phe 55 50

Gln Gly Arg Val Ala Ile Thr Ala Asp Ala Leu Thr Asn Thr Ala Phe 70 75

Met Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 -

Ala Arq Asp Gln Gly Arg Tyr Leu Asp Leu Trp Gly Gln Gly Thr Leu 100 105

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly 115 120

Gly Gly Gly Ser Ala Leu Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Arg Thr Thr Ser Asn Phe Gly Ser Asn Thr Val Asn Trp Tyr Gln Gln Ser Pro Gly Thr 170 175 165 Ala Pro Lys Leu Leu Ile Phe Ser Asn Asn Gln Arg Pro Ser Gly Val 180 185 Ser Asp Arg Phe Ser Gly Ser Lys Ser Gly Ala Ser Ala Ser Leu Ala 200 205 195 Ile Ser Gly Leu Gln Ser Ala Asp Glu Ala Glu Tyr Tyr Cys Ala Ala 220 210 215 Trp Asp Asn Ser Leu Asn Gly Phe Leu Ser Phe Gly Gly Gly Thr Lys 225 230 235 Val Thr Val Leu Gly 245 <210> 1861 <211> 252 <212> PRT <213> Homo sapiens Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn His Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Met Gly 35 40 45 Gly Ile Leu Pro Met Tyr Gly Thr Ala Asn Tyr Ala Gln Lys Phe Gln 50 55 60

. 2216

Gly Arg Val Thr Ile Thr Ala Asp Lys Leu Thr Asn Thr Val Tyr Met

Asp Leu Ser Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys Ala 85 90 95

Arg Glu Leu Gly Leu Ser Ile Val Gly Ala Thr Thr Gly Ala Leu Asp

Met Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ala Val Leu 130 135 140

Thr Gln Pro Ser Ser Val Ser Gly Ala Pro Gly Gln Lys Val Thr Ile 145 \$150\$

Ser Cys Thr Gly Thr Asn Ser Asn Leu Gly Ala Pro Tyr Gly Val Gln \$165\$

Trp Tyr Gln Gln Leu Pro Gly Lys Ala Pro Arg Leu Leu Ile Tyr Asp  $180 \,$   $\,$   $185 \,$   $\,$   $\,$   $190 \,$ 

Asp Asn Ile Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Gln 195 200 205

Ser Gly Thr Ser Val Ser Leu Ala Ile Thr Gly Leu Gln Ala Asp Asp  $210 \\ \hspace*{1.5cm} 215 \\ \hspace*{1.5cm} 220$ 

Glu Ala Asp Tyr Tyr Cys Gln Ser Phe Asp Ser Gly Leu Ser Gly Ser 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Ile Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1862

<211> 255

<212> PRT <213> Homo sapiens

<400> 1862

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Glu Ala Ser Ala Glu Leu Phe Ala Ser Ser 20 25 30

Asp Tie Asp Trp Val Arg Arg Ala Thr Glv Gln Glv Leu Glu Trp Met

35 40 45

Gly Trp Val Asn Pro Ser Ser Gly Asn Ala Gly Tyr Ala Glu Lys Phe 50 55 60

Glu Gly Arg Val Ser Met Thr Thr Asn Ile Pro Lys Lys Thr Val Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Gly Thr Gly Tyr Asp Ile Leu Thr Gly Tyr Tyr Met Gly Ser  $100 \\ 0.05$ 

Ala Phe Asp Gln Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln 130 135 140

Ser Val Val Thr Gln Pro Pro Ser Val Ser Gly Ala Pro Gly Gln Arg 145 150 155 160

Val Thr Ile Ser Cys Thr Gly Thr Ser Ser Asn Ile Gly Ala Asp Tyr 165 170 175

Asp Val His Trp Tyr Arg Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu  $180 \hspace{1cm} 185 \hspace{1cm} 190 \hspace{1cm}$ 

Ile Tyr Gly Asn Asn Asn Arg Pro Ser Gly Val Pro Asp Arg Phe Ser 195 200 205

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Asp Ile Ser Gly Leu Gln 210 215 220

Ala Asp Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Phe Asp Arg Ser Leu 225 \$230\$ 235

Arg Gly Ser Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250 255

<210> 1863

<211> 243

<212> PRT

<213> Homo sapiens

<400> 1863 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 5 1.0 15 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Val Ser Ser Arg 20 25 Thr Ile Ser Tro Val Arg Gln Ala Pro Glv Gln Glv Leu Glu Trp Met 35 40 Gly Gly Ser Leu Pro Pro Ser Gly Ala Pro Ile Tyr Ala Gln Lvs Phe 55 60 Gln Gly Arg Val Ala Ile Thr Ala Asp Ala Leu Thr Asn Thr Ala Phe 7.0 75 Met Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 Ala Arg Asp Gln Gly Arg Tyr Leu Asp Leu Trp Gly Arg Gly Thr Leu 1.00 105 Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly 115 120 Gly Gly Gly Ser Ala Leu Ser Ser Glu Leu Thr Gln Asp Pro Thr Val 130 135 Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Arg Gly Asp Ile 145 150 155 ... 160 Leu Arq Asn Tyr Tyr Ala Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala 170 175 Pro Val Leu Val Ile Tyr Gly Lys Asn Ser Arg Pro Ser Gly Ile Pro 180 185 Asp Arg Phe Ser Ala Ser Asn Thr Gly Lys Thr Ser Ser Leu Thr Ile 200

Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg 210 215 220

Asp Ser Ser Glv Asn Pro Gln Val Phe Gly Gly Gly Thr Gln Leu Thr

225 230 235 240

Val Leu Ser

<210> 1864

<211> 245

<212> PRT <213> Homo sapiens

<400> 1864

Gln Leu Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Lys 1 5 10 15

Asn Trp Trp Ser Trp Val Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp 35 40 45

Ile Gly Glu Ile His His Ser Gly Thr Thr Asn Tyr Asn Pro Ser Leu

Asn Ser Arg Val Ser Ile Ser Leu Asp Lys Ser Thr Asn Gln Phe Ser 65 70 . 75 80

Leu Asn Leu Asn Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys . 85 90 95

Ala Gly Arg Asp Val Gln Gly Ala Pro Tyr Trp Gly Arg Gly Thr Leu  $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly 115 120 125

Gly Gly Ser Ala Gln Ala Val Leu Thr Gln Pro Ser Ser Val Ser 130  $$135\$ 

Gly Ala Pro Gly Gln Arg Val Thr Ile Ser Cys Thr Gly Thr Ser Ser 145 150 155 160

Asn Ile Gly Ala Asp Tyr Tyr Val His Trp Tyr Gln Gln Leu Pro Gly 165 170 175

Thr Ala Pro Lys Val Leu Ile Tyr Gly Asn Ser Asn Arg Pro Ser Gly
180 185 190

Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu 195 200 205

Ala Ile Thr Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Gln 210 215 220

Thr Tyr Asp Ser Ser Leu Ser Gly Trp Val Phe Gly Gly Gly Thr Lys 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Leu Thr Val Leu Gly

<210> 1865 <211> 254 <212> PRT

<213> Homo sapiens

<400> 1865

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  $\phantom{-}20\phantom{+}25\phantom{+}$ 

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Leu 35 \$40\$

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Thr Thr Ser Tyr 65 70 75 80

Met Glu Leu Met Ser Leu Gly Ser Asp Asp Thr Ala Val Tyr Tyr Cys \$85\$ 90 95

Ala Arg Val Glu Gly Val Tyr Asp Ile Leu Thr Gly Tyr Ser Phe Asp  $100 \ \ 105 \ \ \cdot \ 110$ 

Ala Phe Asp Ile Trp Gly Arg Gly Thr Thr Val Thr Val Ser Ser Gly

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln 130 135 140

Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn Thr 165 170 175

Val Asn Trp Tyr Gln Gln Leu Pro Gly Ala Ala Pro Lys Leu Leu Ile 180  $$185\$ 

Tyr Ala Asn Ser Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly 195 200 205

Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln Ser 210 220

Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Val Trp Asp Asp Ser Leu As<br/>n 225 230 235 240

Gly Trp Val Phe Ala Gly Gly Thr Lys Val Thr Val Leu Gly 245 250

<210> 1866

<211> 254 <212> PRT

<213> Homo sapiens

-400- 1066

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr 20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$ \$40\$ \$45\$ .

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe 50

Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys \$95\$

Ala Arg Glu Gln Gly Tyr Asp Ile Leu Thr Gly Tyr Tyr Pro Glu Gly
100 105 110

Gly Trp Phe Asp Pro Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala 130 135 140

Leu Ser Ser Glu Leu Thr Gln Asp Pro Ala Ala Ser Val Ala Leu Gly 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  160

Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Lys Tyr Asp 165 170 175

Pro Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile  $180 \,$ 

Tyr Ala Lys Asn Asn Arg Pro Thr Gly Ile Ser Asp Arg Phe Ser Gly 195  $\phantom{\bigg|}200\phantom{\bigg|}$  205

Ser Ile Ser Gly Asn Thr Gly Ser Leu Thr Ile Thr Gly Ala Gln Pro 210 215 220

Glu Asp Glu Ala Glu Tyr Tyr Cys Gly Ser Arg Asp Ser Ser Gly Thr 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

His Leu Ile Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly  $245 \ \ 250$ 

<210> 1867

<211> 250

<212> PRT

<213> Homo sapiens

<400> 1867

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser

Ser Val Lys Val Ser Cyş Arg Ala Ser Gly Gly Ser Phe Asn His Ala \$20\$

Ile Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Met Gly 35 40 45

Gly Ile Leu Pro Met Tyr Gly Thr Ala Asn Tyr Ala Gln Lys Phe Gin

55 50 60

Gly Arg Val Thr Ile Thr Ala Asp Lys Leu Thr Asn Thr Val Tyr Met 70 75

Asp Leu Ser Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys Ala 90

Arg Glu Leu Gly Leu Ser Ile Val Gly Ala Thr Thr Gly Ala Leu Asp 100 105

Met Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 120

Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Ser Ser Glu 135

Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg 145 150

Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Ser Tyr Ala Ser Trp Tyr 165 170

Gln Gln Lys Pro Gly Gln Ala Pro Val Met Val Met Phe Gly Glu Asn 185

Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly

Asn Thr Ala Ser Leu Thr Ile Thr Gly Thr Gln Ala Glu Asp Glu Ala 210 215

Asp Tyr Tyr Cys Asn Ser Arg Gly Ser Ile Gly Ser His Val Glu Phe 225 230 235

Gly Gly Gly Thr Gln Leu Thr Val Leu Ser 250 245

<210> 1868

<211> 257

<212> PRT

<213> Homo sapiens

·<400> 1868

Glu Val Gln Leu His Glu Ser Gly Pro Gly Leu Leu Lys Pro Ser Gln 1 5 10 15

Т	hr	Leu	Ser	Leu 20	Thr	Cys	Ala	Ile	Ser 25	Gly	Asp	Ser	Val	Ser 30	Ser	Asn
S	er	Ala	Ala 35	Trp	Asn	Trp	Ile	Thr 40	Gln	Ser	Pro	Ser	Thr 45	Gly	Leu	Glu
Т	rp	Leu 50	Gly	Arg	Thr	Tyr	Tyr 55	Arg	Pro	Lys	Trp	Tyr 60	Asn	Asp	Tyr	Ala
	al 65	Ser	Ala	Lys	Ser	Arg 70	Ile	Thr	Ile	Asn	Pro 75	Asp	Thr	Ser	Lys	Asn 80
				Leu	85					90					95	
	-	-	-	Ala 100					105					110		
	-	•	115	Tyr				120	-	-			125			
		130		Gly	-		135					140				
1	45			Ser		150					155					160
				Ile	165					170					175	
	-			Tyr 180			·		185				-	190		
			195					200					205			
		210		Gly		-	215					220				
2	25			Ala		230		-			235					240
Т	hr	Arg	Ser	Thr	Arg	Val	Phe	Gly	Gly	Gly	Thr	Lys	Leu	Thr	Val	Leu

245 250 255

Gly

<210> 1869

<211> 251 <212> PRT

<213> Homo sapiens

<400> 1869

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 \$40\$

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu 50 55 60

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe  $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu 130 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 150 150 160

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165  $$170\ \ \, 170\ \ \ \, 175$ 

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 205

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1870

<211> 251

<212> PRT

<213> Homo sapiens .

<400> 1870

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 \$40\$

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu 50 55 60

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe 100 \$105\$ . 110

Asp Tyr Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu 130 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 150 155 Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 170 Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 1.85 Gly Ser Lys Arq Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 200 195 Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 220 210 215 Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235 Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250 <210> 1871 <211> 248 <212> PRT <213> Homo sapiens <400> 1871 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 10 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 25 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 Met Glu Leu Arg Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys

2228

90

. 95

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe

Asp Tyr Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser Ser Glu Leu Thr 130 135 140

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145 150 155 160

Cys Gln Gly Asp Ser Leu Gly Ser Tyr Tyr Thr Asn Trp Phe Gln Gln 165  $\phantom{\bigg|}$  170  $\phantom{\bigg|}$  175

Lys Pro Gly Gln Ala Pro Leu Leu Val Val Tyr Ala Lys As<br/>n Lys Arg 180 185 190

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr \$195\$

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 \$215\$

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly \$225\$ \$230\$ \$230\$ \$235\$ \$240\$

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1872

<211> 251

<212> PRT

<213> Homo sapiens

<400> 1872

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1  $\phantom{-}$  10  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  $20 \ \ 25 \ \ 30$ 

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 \$40\$

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu

50 55 60

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe  $100 \,\,$   $\,$   $110 \,\,$ 

Asp Tyr Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu 130 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 150 155 160

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 170 175

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 205

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 215

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1873

<211> 247

<212> PRT

<213> Homo sapiens

<400> 1873

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 2.0 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 70 Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg Glu Lys Tyr Asp Ile Leu Thr Gly Tyr Tyr Asp Ala Phe Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 Ser Gly Gly Gly Ser Gly Gly Gly Ser Ser Glu Leu Thr Gln 130 135 Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys 150 155 Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Thr Asn Trp Phe Gln Gln Lys 165 170 Pro Gly Gln Ala Pro Leu Leu Val Val Tyr Ala Lys Asn Lys Arg Pro 180 185 Ser Gly Ile Pro Asp Arq Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala 195 200 205 Ser Leu Thr Ile Thr Glv Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr 210 215 220 Cys His Ser Arg Asp Ser Ser Gly Asn His Val Leu Phe Gly Gly Gly 225 230 235 240

Thr Lys Leu Thr Val Leu Gly

245

<210> 1874 <211> 252 <212> PRT <213> Homo sapiens

<400> 1874
Gin Val Asn Leu Arg Glu Ser Gly Gly Glu Val Lys Lys Pro Gly Ala
1 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn Thr 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$ \$40\$ \$45\$ .

Gly Ile Ile Asn Pro Ser Gly Gly Ser Thr Ser Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr  $_{65}$   $\phantom{000}$  70  $\phantom{000}$  75  $\phantom{000}$  80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Ala Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Glu Met Gly Tyr Asp Ile Leu Thr Gly Tyr Tyr Leu Asn Tyr 100 105 110

Met Asp Val Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val  $130 \ \ 135 \ \ 140$ 

Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr 145 150 155 160

Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val

Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr 180 185 190

Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser 195 \$200\$

Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu 210 215 Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg 230 Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 <210> 1875 <211> 252 <212> PRT <213> Homo sapiens <400> 1875 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 10 Ser Val Lys Val Ser Cys Lys Ala Pro Gly Tyr Thr Phe Thr Ser Tyr 25 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Ile Ile Asn Pro Ser Gly Gly Ser Thr Ser Tyr Ala Gln Lys Phe 55 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr 70 75 ... 80 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 Ala Arg Glu Met Gly Tyr Asp Ile Leu Thr Gly Tyr Tyr Leu Asn Tyr 105 100 Met Asp Val Trp Gly Arq Gly Thr Met Val Thr Val Ser Ser Gly Gly 115 120 Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val 135 Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr

2233

Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val 165 170 Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr 185 Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser 205 195 200 Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu 215 220 Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg 230 235 Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 250 <210> 1876 <211> 248 <212> PRT <213> Homo sapiens <400> 1876 Gln Val Asn Leu Arg Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Gly Tyr 25 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu, Trp Val Ala Ser Val Arg Asn Asp Gly Ser Asn Thr Tyr Tyr Thr Asp Ser Val 55 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 Leu Gln Met Asn Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 90 85 Val Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe 105 100

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Gly Gly Gly Ser Asp Ile Val Met 130 135 140

Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Val Gly Asp Arg Val Thr 145 150 155 160

Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Trp Leu Ala Trp Tyr \$165\$ \$170\$

Gln Gln Lys Pro Gly Arg Ala Pro Lys Val Leu Ile Tyr Lys Ala Ser  $180 \,$   $185 \,$   $190 \,$ 

Thr Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly 195  $200\,$ 

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala 210 215 220

Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp Thr Phe Gly Gln 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}$ 

Gly Thr Lys Leu Glu Ile Lys Arg

<210> 1877

<211> 248

<212> PRT

<213> Homo sapiens

<400> 1877

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$ \$40\$

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu  $_{\rm 50}$ 

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr

65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Glu Asp Thr Val Val Tyr Tyr Cys 85 90 95

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe  $100 \ \ 105 \ \ 110$ 

Asp Tyr Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115  $_{\odot}$  120 125

Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser Ser Glu Leu Thr 130 135 140

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145 \$150\$

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Thr Asn Trp Phe Gln Gln 165 170 175

Lys Pro Gly Gln Ala Pro Leu Pro Val Val Tyr Ala Lys Asn Lys Arg 180 185 190

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys His Ser Arg Asp Ser Ser Gly Asn His Val Leu Phe Gly Gly 225 \$230\$

Gly Thr Lys Leu Thr Val Leu Gly

<210> 1878

<211> 251

<212> PRT

<213> Homo sapiens

<400> 1878

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu 50 . 55 60

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe  $100 \,$   $105 \,$   $110 \,$ 

Asp Tyr Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu 130 135

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  160

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 170 175

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 205

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly

<210> 1879

<211> 248 <212> PRT <213> Homo sapiens

<400> 1879

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr 20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ 40 \ \ 45$ 

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe 50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe  $100 \,$   $\,$   $110 \,$ 

Asp Tyr Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 \$120\$

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Val Met 130 135 140

Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Val Gly Asp Arg Val Thr 145  $\phantom{000}$  150  $\phantom{000}$  155  $\phantom{000}$  160

Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Trp Leu Ala Trp Tyr 165 170 175

Gln Gln Lys Pro Gly Arg Ala Pro Lys Val Leu Ile Tyr Lys Ala Ser 180 185 190

Thr Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly 195 200 205

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala 210  $\,$  215  $\,$  220  $\,$ 

Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp Thr Phe Gly Gln 225 \_\_\_\_ 230 \_\_\_\_ 235 \_\_\_ 240

Gly Thr Lys Leu Glu Ile Lys Arg 245

<210> 1880

<211> 253

<212> PRT <213> Homo sapiens

<213> Homo sapien

<400> 1880

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr
20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ 40 \ \ 45$ 

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Glu Ser His Tyr Asp Ile Leu Thr Gly Tyr Tyr Ser Asn Pro  $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Ser Phe Asp Ile Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Gly Gly Gly Ser Gln Ser 130 135 140 .

Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile 145 150 155 160

Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr \$165\$ \$170\$ \$170\$ \$175\$ .

Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile 180 185 190

Tyr Lys Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly
195 200 205

Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala 210 215 220

Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr 225 230 235 240

Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly \$245\$

<210> 1881 <211> 244

<212> PRT

<213> Homo sapiens

<400> 1881

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1  $\phantom{-}$  10  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr \$20\$

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$ \$40\$

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe 50 55.

Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Ser Gly Ser Tyr Tyr Tyr Asp Ala Phe Asp Ile Trp Gly
100 105 110

Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Ser Asp Ile Val Met Thr Gln Ser Pro

Ser Thr Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg 145 \$150\$ 150 155 160

Ala Ser Gln Gly Ile Ser Ser Trp Leu Ala Trp Tyr Gln Gln Lys Pro 165 170 175

Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser 180 \$185\$ . 190 \$

Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr 195 200 205

Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys 210 215 220

Gln Gln Ala Asn Ser Phe Pro Leu Thr Phe Gly Gly Gly Thr Lys Val 225 230 235 240

Glu Ile Lys Arg

<210> 1882

<211> 239 · <212> PRT

<213> Homo sapiens

213> nomo sapiem

<400> 1882

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Lys Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr \$20\$

Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  $_{\rm 35}$   $_{\rm 40}$   $_{\rm \cdot}$   $_{\rm 45}$ 

Ala Val Val Ser Ser Asp Gly Gly Asn Lys Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Val Tyr  $_{65}$   $\phantom{0}75$ 

Leu Gln Met Asn Ser Leu Arg Ala Asp Asp Thr Ala Val Tyr Tyr Cys

85 90 95

Ala Lys Thr Gly Ser Gly Phe Asp Tyr Trp Gly Arg Gly Thr Leu Val

Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly 115 120 125

Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Thr Leu Ser Ala 130 135 140

Ser Ile Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Glu Gly Ile 145 \$150\$

Tyr His Trp Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys 165 170 175

Leu Leu Ile Tyr Lys Ala Ser Ser Leu Ala Ser Gly Ala Pro Ser Arg 180 185 190

Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser

Leu Gln Pro Asp Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Asn 210 215 220

Tyr Pro Leu Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg 225 \$230\$

<210> 1883

<211> 243

<212> PRT

<213> Homo sapiens

<400> 1883

Lys Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg 1 5 10 15

Ser Leu Arg Leu Ser Cys Val Thr Ser Gly Phe Thr Phe Ser Ser Tyr \$20\$

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  $35 \qquad \qquad 40 \qquad \qquad 45$ 

Ala Gly Ile Ser Tyr Asp Gly Ala Lys Glu Tyr Tyr Gly Asp Pro Val 50 55 60

Lys 65	Gly	Arg	Phe	Thr	Ile 70	Ser	Arg	Asp	Asn	Thr 75	Lys	Lys	Thr	Leu	Asn 80
Leu	Gln	Met	Asn	Ser 85	Leu	Arg	Ala	Glu	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys
Ala	Arg	Asp	Gly 100	Tyr	Arg	Thr	Asn	Asp 105	Ala	Leu	Asp	Ile	Trp 110	Gly	Gln
Gly	Thr	Leu 115	Ala	Thr	Val	Ser	Ser 120	Gly	Gly	Gly	Gly	Ser 125	Gly	Gly	Gly
Gly	Ser 130	Gly	Gly	Gly	Gly	Ser 135	Asp	Ile	Gln	Met	Thr 140	Gln	Ser	Pro	Ser
Thr 145	Leu	Ser	Ala	Ser	Ile 150	Gly	Asp ·	Arg	Val	Thr 155	Ile	Thr	Cys	Arg	Ala 160
Ser	Glu	Gly	Ile	Tyr 165	His	Trp	Leu	Ala	Trp 170	Tyr	Gln	Gln	Lys	Pro 175	Gly
Lys	Ala	Pro	Lys 180	Leu	Leu	Ile	Tyr	Lys 185	Ala	Ser	Ser	Leu	Ala 190	Ser	Gly
Ala	Pro	Ser 195	Arg	Phe	Ser	Gly	Ser 200	Gly	Ser	Gly	Thr	Asp 205	Phe	Thr	Leu
Thr	Ile 210	Ser	Ser	Leu	Gln	Pro 215	Asp	Asp	Phe	Ala	Thr 220	Tyr	Tyr	Cys	Gln
Gln 225	Tyr	Ser	Asn	Tyr	Pro 230	Leu	Thr	Phe	Gly	Gly 235	Gly	Thr	Lys.	Leu	Glu 240
Ile	Lys	Arg													
<210> 1884 <211> 242 <212> PRT <213> Homo sapiens															
	)> 18 Val		Leu	Val	Glu	Ser	Gly	Gly	Gly 10	Leu	Val	Gln	Pro	Gly 15	Gly

ser	Leu	Arg	Leu 20	Ser	Cys	Ala	Ala	Ser 25	Gly	Phe	Thr	Phe	Ser 30	Asp	Tyr
Gly	Met	His 35	Trp	Val	Arg	Gln	Arg 40	Pro	Gly	Lys	Gly	Leu 45	Glu	Trp	Ile
Ala	Phe 50	Ile	Gly	Ser	Asp	Gly 55	Ser	Asn	Lys	Tyr	Tyr 60	Gly	Asp	Thr	Val
Lys 65	Gly	Arg	Phe	Thr	Ile 70	Ser	Arg	Asp	Asn	Ala 75	Lys	Asn	Ser	Leu	Tyr 80
Leu	Gln	Met	Asn	Ser 85	Leu	Arg	Ala	Glu	Gly 90	Thr	Ala	Val	Tyr	Tyr 95	Cys
Ala	Arg	Asp	Trp 100	Asp	Met	Asp	Val	Trp 105	Gly	Gln	Gly	Thr	Met 110	Val	Thr
Val	Ser	Ser 115	Gly	Gly	Gly	Gly	Ser 120	Gly	Gly	Gly	Gly	Ser 125	Gly	Gly	Gly
Gly	Ser 130	Ser	His	Val	Ile	Leu 135	Thr	Gln	Pro	Arg	Ser 140	Val	Ser	Gly	Ser
Pro 145	Gly	Gln	Ser	Val	Thr 150	Ile	Ser	Cys	Thr	Gly 155	Thr	Ser	Ser	qaA	Val 160
Gly	Gly	Tyr	His	Tyr 165	Val	Ser	Trp	Tyr	Gln 170	Gln	His	Pro	Gly	Lys 175	Ala
Pro	Arg	Leu	Met 180	Ile	Tyr	Glu	Val	Thr 185	ГЛS	Arg	Pro	Ser	Gly 190	Val	Ser
Asn	Arg	Phe 195	Ser	Gly	Ser	Lys	Ser 200	Gly	Asn	Thr	Ala	Ser 205	Leu	Thr	Ile
	Gly 210	Val	Gln	Ala	Glu	Asp 215	Glu	Ala	Asp	Tyr	Tyr 220	Cys	Ser	Ser	Tyr

Leu Gly

Thr Ser Ala Ser Thr Val Ile Phe Gly Gly Gly Thr Lys Leu Thr Val 225 230 235 240

<210> 1885 <211> 247 <212> PRT <213> Homo sapiens <400> 1885 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val Arg Val Ser Cys Lys Ser Ser Gly Tyr Thr Phe Thr Asn Tyr Gly Ile Ser Trp Val Arq Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Trp Ile Ser Asn Asn Asn Gly Lys Thr Tyr Tyr Ala Gln Lys Val Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Asp Tyr 70 Met Glu Leu Arg Gly Leu Arg Ser Asp Asp Thr Ala Ile Tyr Tyr Cys 85 90 95 Ala Arg Asp Asn Gly Gly Gly Thr Ile Gly Phe Asp Tyr Trp Gly Arg 100 105 Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 120 115 Gly Ser Gly Gly Gly Ser Ala Gln Ala Val Leu Thr Gln Pro Ser 130 135 Ser Val Ser Gly Ala Pro Gly Gln Arg Val Thr Met Ser Cys Thr Gly 150 145 155 Ser Ser Ser Asn Ile Gly Ala Gly Tyr Asp Val His Trp Tyr Gln Gln 170 165 Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Asp Asn Thr Asn Arg 185 Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Arg Ser Gly Thr Ser 195 200

Ala Ser Leu Ala Ile Thr Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Phe Cys Gln Ser Tyr Asp Ile Thr Leu Ser Ala Val Phe Gly Thr Gly 225 230 235 240

Thr Lys Val Thr Val Leu Gly 245

<210> 1886

<211> 240

<212> PRT

<213> Homo sapiens

<400> 1886

Gly Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Thr Ser Gly Phe Arg Phe Ser Asp Tyr \$20\$

Ala Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  $_{\rm 35}$   $_{\rm 40}$   $_{\rm 45}$ 

Ser Ser Ile Thr Gly Ser Gly Gly Gly Thr His Tyr Ala Gly Ser Val\$50\$

Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Val Tyr  $_{65}$   $_{70}$   $_{70}$   $_{75}$  80

Leu Gln Met Asn Asn Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Ser Phe Val Leu Asp Tyr Trp Gly Lys Gly Thr Leu Val Thr Val

Ser Ser Gly Gly Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Gly 115 120 125

Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly 130 135

Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly 145 150 150

Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys 165 170 175

Leu Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg 180 185 190

Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly 195 200 205

Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr 210 220

Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 225 230 235

<210> 1887

<211> 241

<212> PRT

<213> Homo sapiens

<400> 1887

Glu Val Gln Leu Val Gln Ser Arg Gly Gly Val Val Gln Pro Gly Arg 1  $\phantom{-}$  5  $\phantom{-}$  10  $\phantom{-}$  15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Leu Thr Phe Ser Ser Tyr \$20\$

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ala Val Ile Ser Tyr Asp Gly Arg Asn Lys Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Thr Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  $\phantom{-}$  95  $\phantom{-}$  95

Ala Lys Trp Thr Ser Ser Gly Ala Phe Asp Ile Trp Gly Arg Gly Thr

Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser 115 120 125

Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Thr Leu

130 135 140

Ser Ala Ser Ile Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Glu 145 150 155 160

Gly Ile Tyr His Trp Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala 165 170 175

Pro Lys Leu Leu Ile Tyr Lys Ala Ser Ser Leu Ala Ser Gly Ala Pro 180 185 190

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile 195 \$200\$

Ser Ser Leu Gln Pro Asp Asp Phe Ala Thr Tyr Tyr Cys His Gln Tyr 210 215 220

Ser Asn Tyr Pro Leu Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys 225 230 235 240

Arq

<210> 1888

<211> 241

<212> PRT

<213> Homo sapiens

<400> 1888

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asp Tyr 20 25 30

Gly Met His Trp Val Arg Gln Arg Pro Gly Lys Gly Leu Glu Trp Ile  $35 \ 40 \ 45$ 

Ala Phe Ile Gly Ser Asp Gly Ser Asn Lys Tyr Tyr Gly Asp Thr Val 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr  $_{65}$   $\phantom{0}$  70  $\phantom{0}$  75  $\phantom{0}$  80

Leu Gln Met Asn Ser Leu Arg Ala Glu Gly Thr Ala Val Tyr Tyr Cys \$85\$ 90  $\,$  95

Ala Arg Asp Trp Asp Met Asp Val Trp Gly Gln Gly Thr Met Val Thr 105 100 Val Ser Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly 115 120 Gly Ser His Val Ile Leu Thr Gln Pro Arg Ser Val Ser Gly Ser Pro Gly Gln Ser Val Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly 150 Gly Tyr His Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro 170 Arg Leu Met Ile Tyr Glu Val Thr Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Val Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Ser Ala Ser Thr Val Ile Phe Gly Gly Gly Thr Lys Leu Thr Val Leu 230 235 Gly <210> 1889 <211> 241 <212> PRT <213> Homo sapiens <400> 1889 Gin Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 5 10 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 2.0 25

2249

. 45

Trp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

4.0

Ala Asn Ile Lys Gln Asp Gly Ser Glu Lys Tyr Tyr Val Asp Ser Val 50 55 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 75 65 70 Len Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tvr Tvr Cvs 85 90 Ala Arg Asp Asn Leu His Ala Ala Phe Asp Ile Trp Gly Arg Gly Thr Leu Val Thr Val Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Thr Leu 130 135 Ser Ala Ser Ile Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Glu Gly Ile Tyr His Trp Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala 170 165 Pro Lys Leu Leu Ile Tyr Lys Ala Ser Ser Leu Ala Ser Gly Ala Pro 185 180 Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile 195 200 Ser Ser Leu Gln Pro Asp Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr 210 215

Ser Asn Tyr Pro Leu Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys

230

225 Arg

<210> 1890

<211> 248 <212> PRT

<213> Homo sapiens

<400> 1890

Gln 1	Met	Gln	Leu	Val 5	Gln	Ser	Gly	Gly	Gly 10	Val	Val	Gln	Pro	Gly 15	Arg
Ser	Leu	Arg	Leu 20	Ser	Cys	Ala	Ala	Ser 25	Gly	Phe	Thr	Phe	Ser 30	Ser	Tyr
Gly	Met	His 35	Trp	Val	Arg	Gln	Ala 40	Pro	Gly	Lys	Gly	Leu 45	Glu	Trp	Val
Ala	Val 50	Ile	Ser	Tyr	qaA	Gly 55	Ser	Ile	Lys	Tyr	Tyr 60	Ala	Asp	Ser	Val
Lys 65	Gly	Arg	Phe	Thr	Ile 70	Ser	Arg	Asp	Asn	Ser 75	Lys	Asn	Thr	Leu	Tyr 80
Leu	Gln	Met	Asn	Ser 85	Leu	Arg	Ala	Glu	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Сув
Ala	Arg	Tyr	Tyr 100	Tyr	His	Ser	Ser	Gly 105	Ser	Asp	Ala	Phe	Asp 110	Ile	Trp
Gly	Gln	Gly 115	Thr	Leu	Val	Thr	Val 120	Pro	Ser	Glý	Gly	Gly 125	Gly	Ser	Gly
Gly	Gly 130	Gly	Ser	Gly	Gly	Gly 135	Gly	Ser	Gln	Ser	Val 140	Leu	Thr	Gln	Pro
Pro 145	Ser	Ala	Ser		Thr 150	Pro	Gly	Gln	Arg	Val 155	Thr	Ile	Ser	Cys	Ser 160
Gly	Ser	Ser	Ser	Asn 165	Ile	Gly	Ser	Asn	Thr 170	Val	Asn	Trp	Tyr	Gln 175	Arg
Leu	Pro	Gly	Ala 180	Ala	Pro	Gln	Leu	Leu 185	Ile	Tyr	Asn	Asn	Asn 190	Gln	Arg
Pro	Ser	Gly 195	Val	Pro	Ąsp	Arg	Phe 200	Ser	Gly	Ser	Lys	Ser 205	Gly	Thr	Ser
Ala	Ser 210	Leu	Ala	Ile	Ser	Gly 215	Leu	Gln	Ser	Glu	Asp 220	Glu	Ala	Asp	Tyr
Tyr 225	Cys	Ala	Ala	Trp	Asp 230	Asp	Ser	Leu	Asn	Gly 235	Trp	Val	Phe	Gly	Gly 240

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1891 <211> 249

<212> PRT <213> Homo sapiens

<400> 1891

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Lys Gln Pro Gly Thr 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Ser Cys Tyr

Asp Val Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ \, 40 \ \ \, 45$ 

Gly Arg Ile Asn Pro Asn Ser Gly Asn Thr His Tyr Ala Gln Lys Phe 50 60

Gln Asp Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Asn Ser Leu Arg Pro Asp Asp Thr Ala Val Tyr Phe Cys 85 90 95

Ala Arg Val Gly Ile Lys Ala Ala Ala Val Asp Asn Phe Glu Tyr Trp

Gly Arg Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Ser Gly

Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser Val Leu Thr Gln 130 135 140

Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Thr Cys 145 150 155 160

Ser Gly Ser Ser Ser Asn Ile Gly Asp Tyr Tyr Val Asn Trp Tyr Gln 165 170 175

Gln Val Ser Gly Thr Thr Pro Lys Leu Ile Ile Tyr Arg Asp Asp Gln 180 185 190

Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Ala

Ser Ala Ser Leu Ala Ile Ser Gly Leu Arg Ser Glu Asp Glu Ala Asn 210 215 220

Tyr Phe Cys Ala Ala Trp Asp Asp Ser Leu Arg Glu Phe Ala Phe Gly 225 230 235 240

Thr Gly Thr Lys Val Thr Val Leu Gly 245

<210> 1892

<211> 247

<212> PRT <213> Homo sapiens

<400> 1892

Gln Val Thr Leu Lys Glu Ser Gly Gly Asp Leu Val Gln Pro Gly Gly

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Leu Thr Phe Met Ser Tyr 20 25 30

Ala Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ser Ser Ile Ser Gly Ser Gly Asp Asn Thr Tyr Tyr Gly Asp Ser Val $_{50}$   $_{60}$ 

Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Phe  $_{65}$   $\phantom{0}$  75  $\phantom{0}$  80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Phe Tyr Tyr Cys 85 90 95

Ala Lys Val His Ser Thr Gly Tyr Ala Phe Glu Asn Trp Gly Arg Gly
100 105 110

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Ser Ala Gln Ser Val Leu Thr Gln Pro Pro Ser 130 \$140\$

Val Ser Gly Ala Pro Gly Gln Arg Val Thr Ile Ser Cys Thr Gly Ser

145 150 155 160

Ser Ser Asn Ile Gly Ala Gly Tyr Asn Val His Trp Tyr Gln Gln Leu 165 170 175

Pro Gly Thr Ala Pro Arg Leu Leu Ile Ser Ser Asn Thr Asn Arg Pro  $$180\ 190\ ]$ 

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala 195 200 205

Ser Leu Ala Ile Thr Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr 210 215 220

Cys Gln Ser Tyr Asp Ser Ser Leu Ser Gly Phe Val Phe Gly Thr Gly 225 230 235 240

Thr Lys Val Thr Val Leu Gly 245

<210> 1893

<211> 254 <212> PRT

<213> Homo sapiens

<400> 1893

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr \$20\$ , \$25\$ .

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$ \$40\$ \$45\$

Gly Ile Ile Asn Pro Arg Asp Val Ser Thr Thr Tyr Ala Gln Lys Phe 50

Gln Gly Arg Ala Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr 65  $\phantom{0}70$   $\phantom{0}75$   $\phantom{0}\cdot\phantom{0}$  80

Met Glu Leu Asn Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$ . \$90\$

Ala Arg Glu Tyr Ser Gly Tyr His Tyr Val Glu Gly Gly Ser Tyr Ala 100 105 110

Met Asp Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly

Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Ser 130 135 140

Tyr Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg 145 150 155 160

Val Thr Ile Thr Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Tyr Tyr 165 170 175

Val Asn Trp Tyr Gln Gln Val Ser Gly Thr Ala Pro Lys Leu Ile Ile 180 185 190

Tyr Arg Asn Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly 195 200 205

Ser Lys Ser Gly Ala Ser Ala Ser Leu Ala Ile Ser Gly Leu Arg Ser 210 . 215 220

Glu Asp Glu Ala Asp Tyr Phe Cys Ala Ala Trp Asp Asp Ser Leu Arg 225 230 235

Glu Phe Val Phe Gly Thr Gly Thr Lys Val Thr Val Leu Gly \$245\$

<210> 1894 <211> 249

<211> 249

<213> Homo sapiens

<400> 1894

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Leu Lys Gln Pro Gly Thr 1 5 10

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Ser Ser Tyr 20 25 30

Gly Val Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gly Trp Val Ser Gly Asn Arg Gly Asn Thr Gln Tyr Ala Gln Lys Phe  $50 \ \ 55 \ \ . \ \ 60$ 

Gln Asp Arg Val Arg Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 75 70 Met Glu Leu Arg Ser Leu Arg Pro Asp Asp Thr Ala Val Tyr Phe Cys 90 Ala Arg Val Gly Ile Lys Ala Ala Ala Val Asp Asn Phe Glu Tyr Trp Gly Arg Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Ser Gly 120 Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln Ser Val Leu Thr Gln 135 Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Thr Cys 150 Ser Gly Ser Ser Ser Asn Ile Gly Asp Tyr Tyr Val Asn Trp Tyr Gln 165 Gln Val Ser Gly Thr Thr Pro Lys Leu Ile Ile Tyr Arg Asp Asp Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Ala 200 Ser Ala Ser Leu Ala Ile Ser Gly Leu Arg Ser Glu Asp Glu Ala Asn 210 215 Tyr Phe Cys Ala Ala Trp Asp Asp Ser Leu Arg Glu Phe Ala Phe Gly 225 230 235 Thr Gly Thr Lys Val Thr Val Leu Gly 245

<210> 1895 <211> 253 <212> PRT <213> Homo sapiens

Glu Val Gln Leu Val Gln Ser Gly Ala Ala Val Lys Lys Pro Gly Ala 1 5 1.0

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Thr Tyr 20 Tyr Ile His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 40 Gly Ile Ile Asn Pro Val Asn Gly Asn Thr Ile Tyr Ala Gln Lys Phe 50 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Gly Thr Val Asn 65 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Phe Tyr Cys Val Arq Glu Gly Gly Gly Asp Ala Tyr Asp Val Ala Pro Tyr Tyr Phe 1.00 105 Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 120 115 Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ala Val 130 135 Leu Thr Gln Pro Ser Ser Val Ser Gly Ala Pro Gly Gln Arg Val Thr 155 160 145 150 Ile Ser Cys Thr Gly Ser Ser Ser Asn Ile Gly Asp Gly Tyr Asp Val 170 175 165 His Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr 180 185 190 Gly Asn Ser His Arq Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser 195 200 Lys Ser Asp Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln Val Glu 220 215 Asp Glu Ala Asp Tyr Phe Cys His Ser Tyr Asp Ser Ser Val Ser Gly

Trp Ile Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

230

225

2257

<210> 1896 <211> 245 <212> PRT <213> Homo sapiens <400> 1896 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 10 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 20 , 25 Ala Met His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met 40 Gly Trp Ile Asn Ala Gly Asn Gly Asn Thr Lys Tyr Ser Gln Lys Phe 55 Gln Glv Arg Val Thr Ile Thr Arg Asp Thr Ser Ala Ser Thr Ala Tyr 70 75 . Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95 Ala Arg Glu Gly Pro Gly Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln 100 105 110 Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 120 125 Gly Ser Gly Gly Gly Ser Ala Leu Glu Thr Thr Leu Thr Gln Ser 130 135 140 Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys 145 150 155 Arg Ala Ser Gln Ala Ile Gly Ser Asn Tyr Leu Ala Trp Tyr Gln Gln

170 165

Lys Pro Gly Gln Pro Pro Ser Leu Leu Ile Tyr Gly Ala Ser Ser Arg 180 185

Ala Thr Gly Ile Pro Asp Arg Phe Ser Ala Ser Gly Ser Gly Thr Asp . 195 200 205

Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr 210 215 220

Tyr Cys Gln Gln Tyr Gly Ser Ser Ile Thr Phe Gly Gln Gly Thr Arg 225 230 235 240

Leu Glu Ile Lys Arg 245

<210> 1897

<211> 249

<212> PRT

<213> Homo sapiens

<400> 1897

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Arg Val Ser Cys Lys Ser Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ \, 40 \ \ \, 45$ 

Gly Trp Ile Ser Asn Asn Asn Gly Lys Thr Tyr Tyr Ala Gln Lys Val\$50\$

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Asp Tyr 65 70 75 80

Met Glu Leu Arg Gly Leu Arg Ser Asp Asp Thr Ala Ile Tyr Tyr Cys  $85\,$  .  $\,90\,$ 

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser Val Leu Thr Gln Pro Pro 130 135

Ser Val Ser Gly Ala Pro Gly Gln Arg Val Thr Ile Ser Cys Thr Gly 145 150 155 160

Ser Ser Ser Asn Ile Gly Ala Asp Tyr Asp Val His Trp Tyr Gln Leu

165 170 175

Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Gly Asn Thr Asn Arg

Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser

Ala Ser Leu Thr Ile Ala Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Gln Ser Tyr Asp Ser Ser Leu Ser Gly Ser Val Val Phe Gly 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$  240

Gly Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1898 <211> 240

<211> 240 <212> PRT

<213> Homo sapiens

<400> 1898

Gln Val Gln Leu Gln Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Tyr Ser Ser Tyr \$20\$ \$25\$ \$30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ala Val Ile Ser Tyr Asp Gly Ser Ile Lys Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Leu Asp Phe Asp Tyr Trp Gly Lys Gly Thr Leu Val Thr

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly 115 120 125

Gly Ser Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro 130 135 140

Gly Gln Lys Val Thr Ile Ser Cys Ser Gly Ser Thr Ser Asn Ile Gly 145 \$150\$

Asn Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys 165 . 170 175

Phe Met Ile Tyr Asp Val Ser Lys Arg Pro Ser Gly Val Ser Asn Arg 180 185 190

Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly 195 200 205

Val Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Ser 210 215 220

Ala Ser Thr Val Ile Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 225 230 235 240

<210> 1899

<211> 247

<212> PRT

<213> Homo sapiens

<400> 1899

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Gly
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Ala Tyr Thr Phe Thr Arg Tyr \$20\$

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Ile Ile Asn Pro Ser Gly Gly Arg Thr Ser Tyr Ala Gln Lys Phe 50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Leu Gly Ile Ala Gly Thr Ile Tyr Phe Asp Tyr Trp Gly
100 105 110

Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 \$120\$

Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Pro 130 135 140

Ser Val Ser Ala Ala Pro Gly Gln Lys Val Thr Ile Ser Cys Ser Gly 145 150 155 160

Ser Thr Ser Asn Ile Gly Asn Asn Tyr Val Ser Trp Tyr Gln Gln His

Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Asp Val Ser Lys Arg Pro 180 185

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Asn Ser Ala 195 200 205

Ser Leu Asp Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr 210 215 220

Cys Ala Ala Trp Asp Asp Ser Leu Ser Glu Phe Leu Phe Gly Thr Gly 225 230 235 240

Thr Lys Leu Thr Val Leu Gly 245

<210> 1900 <211> 245

<212> PRT

<213> Homo sapiens

<400> 1900

Gln Val Gln Leu Val Gln Ser Gly Ser Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Thr Ser Gly Tyr Ser Phe Thr Gly Tyr 20 25 30

Phe Ile His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Leu Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Ala Ser Arg Asp Ile Val Val Leu Pro Leu Ala Ile Trp
100 105 110

Gly Gly Gly Ser Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser 130 135 140

Pro Ser'Thr Leu Ser Ala Ser Ile Gly Asp Arg Val Thr Ile Thr Cys 145 150 150 155

Arg Ala Ser Glu Gly Ile Tyr His Trp Leu Ala Trp Tyr Gln Gln Lys \$165\$

Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Lys Ala Ser Ser Leu Ala 180 185 190

Ser Gly Ala Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe 195 200 205

Thr Leu Thr Ile Ser Ser Leu Gln Pro Asp Asp Phe Ala Thr Tyr Tyr 210 215 220

Cys Gln Gln Tyr Ser Asn Tyr Pro Leu Thr Phe Gly Gly Gly Thr Lys 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$  240

Leu Glu Ile Lys Arg 245

<210> 1901

<211> 241 <212> PRT

<213> Homo sapiens

<400> 1901

Glu Val Gln Leu Val Gln Ser Arg Gly Gly Val Val Gln Pro Gly Arg

1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Leu Thr Phe Ser Ser Tyr

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ala Val Ile Ser Tyr Asp Gly Arg Asn Lys Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Thr Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95.

Ala Lys Trp Thr Ser Ser Gly Ala Phe Asp Ile Trp Gly Arg Gly Thr 100 105 110

Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser

Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Thr Leu 130 135 140

Ser Ala Ser Ile Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Glu 145 150 150 155

Gly Ile Tyr His Trp Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala \$165\$

Pro Lys Leu Leu The Tyr Lys Ala Ser Ser Leu Ala Ser Gly Ala Pro  $$180\$ 

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile

Ser Ser Leu Gln Pro Asp Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr 210 215 220

Arg

<210> 1902

<211> 245 <212> PRT

<213> Homo sapiens

<400> 1902

Gln Met Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  $\phantom{-}20\phantom{+}25\phantom{+}$ 

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Leu Val His Pro Asn Asp Gly Ser Val Asn Tyr Ala Gln Lys Phe 50 60

Lys Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Arg Gly Ser Gly Trp Pro Asn Trp Tyr Phe Asp Leu Trp 100 105 110

Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly 115 120 125

Gly Gly Gly Ser Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser 130 \$135\$

Pro Ser Thr Leu Ser Ala Ser Ile Gly Asp Arg Val Thr Ile Thr Cys 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  . 160

Arg Ala Ser Glu Gly Ile Tyr His Trp Leu Ala Trp Tyr Gln Gln Lys 165 170 175

Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Lys Ala Ser Ser Leu Ala 180 . 185 190

Ser Gly Ala Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe

1.95 200 205

Thr Leu Thr Ile Ser Ser Leu Gln Pro Asp Asp Phe Ala Thr Tyr Tyr 210 215 220

Cys Gln Gln Tyr Ser Asn Tyr Pro Leu Thr Phe Gly Gly Gly Thr Lys 225 230 235 240

Leu Glu Ile Lys His 245

<210> 1903

<211> 247 <212> PRT

<213> Homo sapiens

<400> 1903 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Glu Tyr Thr Phe Tyr Asn His 20 25 30

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35  $\phantom{-}40\phantom{+}45\phantom{+}$ 

Gly Phe Ile Asn Pro Ser Gly Asp Ala Ala Trp Tyr Ala Gln Lys Phe 50 55 . 60

Gln Gly Arg Val Thr Leu Thr Arg Asp Thr Ser Thr Arg Thr Val Tyr 65 70 75 80

Met Glu Leu Ser Gly Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Glu Ser Gly Ala Gly Gly Tyr Tyr Tyr Asp Asp Tyr Trp Gly 100 \$105\$

Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
115 120 125

Gly Gly Ser Gly Gly Gly Ser Ala Leu Ser Tyr Val Leu Thr Gln 130 135 140

Pro Pro Ser Val Ser Val Ala Pro Gly Lys Thr Ala Ser Ile Pro Cys 145 150 155 160

Gly Gly Asn Asn Ile Gly Ser Lys Ser Val Gln Trp Tyr Leu Gln Lys 165 170 175

Ala Gly Gln Ala Pro Ile Leu Val Val Tyr Asp Asp Ser Asp Arg Pro  $180 \,$   $185 \,$   $190 \,$ 

Ser Gly Ile Pro Glu Arg Phe Ser Gly Ser Asn Ser Gly Asn Thr Ala 195 200 205

Thr Leu Thr Ile Thr Arg Val Glu Ala Gly Asp Glu Ala Asp Tyr Tyr 210 215 220

Cys Gln Val Trp Asp Ser Ser Ser Asp His Trp Phe Phe Gly Gly Gly 225 230 235 240

Thr Lys Leu Thr Val Leu Gly 245

<210> 1904

<211> 249

<212> PRT

<213> Homo sapiens

<400> 1904

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Leu Lys Gln Pro Gly Thr  $_{1}$  5  $_{10}$  10

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Ser Ser Tyr 20 25 30

Gly Val Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $_{\rm 35}$   $_{\rm 40}$   $_{\rm 45}$ 

Gly Trp Val Ser Gly Asn Arg Gly Asn Thr Gln Tyr Ala Gln Lys Phe  $50 \,\,\,$  55  $\,\,$  60

Gln Asp Arg Val Arg Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 . 80

Ala Arg Val Gly Ile Lys Ala Ala Ala Val Asp Asn Phe Glu Tyr Trp 100 105 110

Gly Arg Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser Val Leu Thr Gln 130 135 140

Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Thr Cys 145 150 150 155

Ser Gly Ser Ser Ser Asn Ile Gly Asp Tyr Tyr Val Asn Trp Tyr Gln \$165\$

Gln Val Ser Gly Thr Thr Pro Lys Leu Ile Ile Tyr Arg Asp Asp Gln 180 . 185 190

Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Ala 195 200 205

Ser Ala Ser Leu Ala Ile Ser Gly Leu Arg Ser Glu Asp Glu Ala Asn 210 215 , 220

Tyr Phe Cys Ala Ala Trp Asp Asp Ser Leu Arg Glu Phe Ala Phe Gly 225 230 235

Thr Gly Thr Lys Val Thr Val Leu Gly 245

<210> 1905

<211> 240

<212> PRT

<213> Homo sapiens

<400> 1905

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 20 25 30

Glu Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

Ser Tyr Ile Ser Ser Ser Gly Ser Thr Thr Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$

Ala Arg Asp Thr Thr Asp Tyr Trp Gly Gln Gly Thr Met Val Thr Val

Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Gly 115 120 125

Ser Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly 130 135 140

Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser 145 150 155 160

Asn Thr Val Asn Trp Tyr Gln Arg Leu Pro Gly Ala Ala Pro Gln Leu 165 170 175

Leu Ile Tyr Asn Asn Asp Gln Arg Pro Ser Gly Ile Pro Asp Arg Phe 180 185 190

Ser Gly Ser Lys Ser Gly Thr Ser Gly Ser Leu Val Ile Ser Gly Leu 195 200 205

Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ser Trp Asp Asp Ser 210 215 220

Leu Asn Gly Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 225 230 235 240

<210> 1906

<211> 237

<212> PRT

<213> Homo sapiens

<400> 1906

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 20 25 30

Glu Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

35 40 45

Ser Tyr Ile Ser Ser Ser Gly Ser Thr Thr Tyr Tyr Ala Asp Ser Val 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Thr Thr Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val

Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly 115 \$120\$

Ser Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Val 130 135 140

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser 145  $$150\$ 

Trp Leu Ala Trp Tyr Gln Gln Lys Pro Gly Arg Ala Pro Lys Val Leu 165  $\phantom{\bigg|}$  170  $\phantom{\bigg|}$  170  $\phantom{\bigg|}$  175  $\phantom{\bigg|}$ 

Ile Tyr Lys Ala Ser Thr Leu Glu Ser Gly Val Pro Ser Arg Phe Ser 180 185 190

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro . . 210 \$215\$

Trp Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  . 235

<210> 1907

<211> 238

<212> PRT <213> Homo sapiens

<400> 1907

Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr Gly \$20\$

Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly

Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe Gln 50 60

Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr Met 65 70 75 . 80

Arg Asn Leu Trp Gly Leu Asp Tyr Trp Gly Lys Gly Thr Met Val Thr  $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Gly 115 120 125

Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly-130 135 140

Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr 145 \$150\$ \$150\$ \$155\$

Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile 165 170 175

Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly 180 . 185 190

Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala 195 200 205

Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn 210 215 220

His Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 225 230 235

<210> 1908

<211> 244 <212> PRT <213> Homo sapiens

<400> 1908

Gly Val Gln Leu Glu Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr 20 25 30

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 75 \hspace{1cm} 45$ 

Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Gly Asn Ala Trp Gly Ala Phe Asp Ile Trp Gly Arg Ser Thr 100 105 110

Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser 115 \$120\$

Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser 130 135

Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  160

Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly
165 170 175

Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly 180  $$180\$ 

Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu 195 200 205

Thr Val Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser 210 215 220

Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Lys Leu 225 230 235 240

Thr Val Leu Gly

<210> 1909

<211> 243 <212> PRT

<213> Homo sapiens

<400> 1909

Gln Val Gln Leu Gln Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 10 15

Ser Leu Arg Leu Ser Cys Glu Ala Ser Gly Phe Thr Phe Ser His Tyr \$20\$ \$25\$ \$30

Trp Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Ala Val 35 40 45

Ala Ser Ile Lys Arg Asp Gly Ser Gln Gln Tyr Tyr Leu Asp Ser Val 50 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Ser 65 70 75 80

Leu Gln Met Ser Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Glu Gly Val Ala Ala Gly Glu Asp Tyr Trp Gly Arg Gly Thr 100 105 110

Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser 115 120 . 125 .

Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser 130 135 140

Ala Ala Pro Gly Gln Lys Val Thr Ile Ser Cys Ser Gly Ser Asn Ser 145 150 150 160

Asn Ile Gly Asn Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys \$165\$ \$170\$ \$170\$

Val Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val 180 185 190 Ser Asn Arg Phe Ser Ala Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr 195 200 205 Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser 215 220 Tyr Thr Ser Ser Ser Thr Tyr Ala Phe Gly Thr Gly Thr Lys Leu Thr 230 225 Val Leu Gly . <210> 1910 <211> 244 <212> PRT <213> Homo sapiens <400> 1910 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg 5 10 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asp Phe Met Tyr Tyr 20 25 Ala Met His Trp Val Arq Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 3.5 40 Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val 50 60 55 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 90 85 Ala Lys Gly Gly Met Asp Trp Asp Phe Asp Tyr Trp Gly Arg Gly Thr 110 100 105

Met Val Thr Val Ser Ser Gly Gly Gly Gly Gly Gly Gly Gly Gly Ser 115 120 125

Gly Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser 130 135 140

Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser 145 \$150\$

Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly 165 170 175

Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly 180 185

Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser 210 \$215\$

Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Lys Leu 225 230 235 240

Thr Val Leu Gly

<210> 1911

<211> 241

<212> PRT

<213> Homo sapiens

<400> 1911

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly 1 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asp Tyr \$20\$

Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

Ser Tyr Ile Ser Ser Ser Ser Tyr Thr Asn Tyr Ala Asp Ser Val 50 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys

85 90 95

Ala Arg Val Asp Ser Ser Gly Tyr Ala Tyr Tyr Trp Gly Lys Gly Thr  $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser 115 120 125

Gly Gly Gly Gly Ser Ser Glu Leu Ala Gln Asp Pro Ala Val Ser Val 130 135 140

Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg 145 150 155 160

Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val \$165\$

Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg 180 185 190

Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly 195 200 205

Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser 210 215 220

Ser Gly Asn His Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu 225 230 240

Gly

<210> 1912

<211> 240

<212> PRT

<213> Homo sapiens

<400> 1912

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 20 25 30

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ala Val Ile Ser Tyr Asp Gly Ser Ile Lys Tyr Tyr Ala Asp Ser Val 50 55 60 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95 Ala Arg Asp Ala Ala Val Thr Ala Glu Gly Trp Gly Lys Gly Thr Leu 100 105 110 Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly 115 120 125 Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala 130 135 140 Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser 145 150 155 160 Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu 165 170 175 Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe 185 180 Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala 195 . 200 Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser 210 - 215 Gly Asn His Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 235 240 225 230 <210> 1913 <211> 246 <212> PRT <213> Homo sapiens <400> 1913 Gln Val Gln Leu Leu Gln Ser Ala Ala Glu Val Lys Lys Pro Gly Ala

2277

10 15

Phe Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35  $\phantom{\bigg|}40\phantom{\bigg|}$ 

Gly Ile Ile Asn Pro Ser Gly Asp Thr Thr Trp Ser Ala Pro Lys Phe 50 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr 65 .70 .75 .80

Met Glu Val Ser Ser Leu Arg Thr Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Glý Ser Asn Tyr Ser Pro Asp Ala Phe Asp Ile Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Ser Ser Gln Ser Val Leu Thr Gln Pro Pro Ser 130  $\phantom{-}$  . 140  $\phantom{-}$ 

Val Ser Ala Ala Pro Gly Gln Lys Val Thr Ile Ser Cys Ser Gly Ser 145 \$150\$

Thr Ser Asn Ile Gly Asn Asn Tyr Val Ser Trp Tyr Gln Gln His Pro 165 170 175

Gly Lys Ala Pro Lys Leu Met Ile Tyr Asp Val Ser Lys Arg Pro Ser 180 185 190

Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Asn Ser Ala Ser 195 200 205

Leu Asp Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys 210 215 . 220

Ala Ala Trp Asp Asp Ser Leu Ser Glu Phe Leu Phe Gly Thr Gly Thr 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Lys Leu Thr Val Leu Gly 245

<210> 1914 <211> 255 <212> PRT <213> Homo sapiens <400> 1914 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly 15 5 10 1. Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Ala 20 25 Trp Met Tyr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 Gly Arg Ile Arg Ser Lys Ser Asp Gly Gly Thr Thr Asp Tyr Ala Ala 55 Pro Val Glu Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Tyr Thr 70 75 Leu Tyr Leu Gln Met Asn Ser Leu Lys Ser Glu Asp Thr Ala Val Tyr 90 95 Tyr Cys Met Ser Leu Pro Pro Asp Leu Arg Tyr Cys Asp Gly Gly Ile 100 Cys Pro Gly Phe Asp Trp Leu Gly Pro Trp Gly Gln Gly Thr Leu Val 115 Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly 130 135 Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu 155 160 150 145 Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr 170 165 Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val 185 Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser 200 205

Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln 215 Ala Glu Asp Glu Ala Asp Tyr Tyr Cys His Ser Arg Asp Ser Ser Gly 230 235 Asn His Val Leu Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250 <210> 1915 <211> 242 <212> PRT <213> Homo sapiens <400> 1915 Glin Val Glin Leu Leu Glin Ser Ala Ala Glu Val Lys Lys Pro Gly Ser 5 - 10 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr 25 20 Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 40 35 Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe 50 55 Gin Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr 75 70 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 95 85 90 Ala Arg Gly Pro Ser Tyr Tyr Tyr Tyr Met Ala Val Trp Gly Gln Gly 100 105 110 Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly 125 115 120 Ser Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Phe 130 135 Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser

150 155 160

Gln Gly Ile Asn Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Arg 165 170 175

Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val

Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr

Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln 210 215 220

Asp Ser Asp Tyr Pro Leu Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile 225 230 235 240

Lys Arg

<210> 1916

<211> 243

<212> PRT

<213> Homo sapiens

<400> 1916

Gln Val Gln Leu Gln Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Trp Glu Ala Ser Gly Phe Thr Phe Ser His Tyr 20 25 30

Trp Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Ala Val 35 40 45

Ala Ser Ile Lys Arg Asp Gly Ser Gln Gln Tyr Tyr Leu Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Ser 65 70 75 80

Leu Gln Met Ser Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$ 90 95

Ala Arg Glu Gly Val Ala Ala Gly Glu Asp Tyr Trp Gly Arg Gly Thr

Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser

115 120 125

Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser · 130 135 140

Ala Ala Pro Gly Gln Lys Val Thr Ile Ser Cys Ser Gly Ser Asn Ser 145 150 155 160

Asn Ile Gly Asn Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys  $\phantom{-}165\phantom{0}$   $\phantom{-}170\phantom{0}$  170

Val Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val

Ser Asn Arg Phe Ser Ala Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr 195 200 205

Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser 210 215 220

Tyr Thr Ser Ser Ser Thr Tyr Ala Phe Gly Thr Gly Thr Lys Leu Thr 225 230 235 240

Val Leu Gly

<210> 1917

<211> 246

<212> PRT <213> Homo sapiens

<400> 1917

Gln Val Gln Leu Met Gln Ser Ala Ala Glu Glu Asn Lys Pro Gly Pro 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Ile Thr Asn Tyr 20 25 30

Phe Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Ile Ile Asn Pro Ser Gly Asp Thr Thr Trp Ser Ala Pro Lys Phe

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr 65 70 75 80

Met Glu Val Ser Ser Leu Arg Thr Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Gly Ser Asn Tyr Ser Pro Asp Ala Phe Asp Ile Trp Gly Gln \$100\$

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Pro Ser 130 135 140

Val Ser Ala Ala Pro Gly Gln Lys Val Thr Ile Ser Cys Ser Gly Ser 145 150 155 160

Thr Ser Asn Ile Gly Asn Asn Tyr Val Ser Trp Tyr Gln Gln His Pro

. Gly Lys Ala Pro Lys Leu Met Ile Tyr Asp Val Ser Lys Arg Pro Ser 180 185 190

Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Asn Ser Ala Ser 195  $\phantom{\bigg|}200\phantom{\bigg|}$  200  $\phantom{\bigg|}205\phantom{\bigg|}_{11}$ 

Leu Asp Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys 210 215 220

Ala Ala Trp Asp Asp Ser Leu Ser Glu Phe Leu Phe Gly Thr Gly Thr 225 230 235

Lys Leu Thr Val Leu Gly 245

<210> 1918

<211> 240 <212> PRT

<213> Homo sapiens

<400> 1918

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asp Tyr
20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Ala Ile Ser Gly Ser Gly Ser Thr Ser Tyr Ala Asp Ser Val 55 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arq Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 Ala Ser Leu Leu Ser Asp Tyr Trp Gly Arg Gly Thr Thr Val Thr Val 100 105 Ser Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly 120 115 Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly 130 135 140 Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly 145 150 155 Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys 170 175 Leu Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Tyr Arg 185 Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly 195 Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr 210 Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 235 225

<210> 1919

<211> 245 <212> PRT

<213> Homo sapiens

<400> 1919

Glu 1	Val	Gln	Leu	Val 5	Gln	Ser	Glγ	Ala	Glu 10	Val	Lys	Lys	Pro	Gly 15	Ala	
Ser	Val	Lys	Val 20	Ser	Cys	Lys	Ala	Ser 25	Gly	Tyr	Thr	Phe	Thr 30	Ser	Tyr	
Tyr	Met	His 35	Trp	Val	Arg	Gln		Pro	Gly	Gln	Gly	Leu 45	Glu	Trp	Met	
Gly	Ile 50	Ile	Asn	Pro	Ser	Gly 55	Gly	Ser	Thr	Ser	Tyr 60	Ala	Gln	Lys	Phe	
Gln 65	Gly	Arg	Val	Thr	Met 70	Thr	Arg	Asp	Thr	Ser 75	Thr	ser	Thr	Val	Tyr 80	
Met	Glu	Leu	Ser	Ser 85		Arg	Ser	Glu	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys	
Ala	Arg	Asp	Leu 100	Ser	Gly	Ser	Tyr	Phe 105	Ser		туг	Phe	Asp 110	Tyr	Trp	
Gly	Gln	Gly 115	Thr	Leu	Val	Thr	Val 120	Ser	Ser	Gly	Gly	Gly 125	Gly	Ser	Gly	
Gly	Gly 130	Gly	Ser	Gly	Gly	Gly 135	Gly	Ser	Ser	Glu	Leu 140	Thr	Gln	Asp	Pro	
Ala 145	Val	Ser	Val	Ala	Leu 150	Gly	Gln	Thr	Val	Arg 155	Ile	Thr	Cys	Gln	Gly 160	
Asp	Ser	Leu	Arg	Ser 165	Tyr	Tyr	Ala	Ser	Trp 170	Tyr	Gln	Gln	ГÀз	Pro 175	Gly	
Gln	Ala	Pro	Val 180	Leu	Val	Ile	Tyr	Gly 185	Lys	Asn	Asn	Arg	Pro 190	Ser	Gly	
Ile	Pro	Asp 195	Arg	Phe	Ser	Gly	Ser 200	Ser	Ser	Gly	Asn	Thr 205	Ala	Ser	Leu	
Thr	Ile 210	Thr	Gly	Ala	Gln	Ala 215	G1u	Asp	Glu	Ala	Asp 220	Tyr	Tyr	Cys	Asn	
Ser	Arg	Asp	Ser	Ser	Gly	Asn	His	Val	Val	Phe	Gly	Gly	gly	Thr	Lys	

Leu Thr Val Leu Gly 245

<210> 1920 <211> 246

<212> PRT <213> Homo sapiens

<400> 1920

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 . 10 . 15

Ser Ile Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser His Ser 20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Gly Ile Ile Pro Leu Phe Gly Ser Ala Asn Tyr Ala Glu Arg Phe

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Val Ala Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Thr Ser Leu Thr Ser Glu Asp Thr Ala Met Tyr Phe Cys 85 90 95

Ala Arg Val Glu Trp Glu Asp Ile Val Val Gly Ser Ala Phe Asp Ile 100 105 110

Trp Gly Lys Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser 115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln Met Thr Gln  $_{130}$   $_{135}$   $_{140}$ 

Ser Pro Ser Thr Leu Ser Ala Ser Ile Gly Asp Arg Val Thr İle Thr 145  $\phantom{\bigg|}150\phantom{\bigg|}$  .  $\phantom{\bigg|}155\phantom{\bigg|}$  160

Cys Arg Ala Ser Glu Gly Ile Tyr His Trp Leu Ala Trp Tyr Gln Gln 165 170 175

Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Lys Ala Ser Ser Leu 180 185 190

Ala Ser Gly Ala Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp 195 200 205

Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Asp Asp Phe Ala Thr Tyr 210 215 220

Tyr Cys Gln Gln Tyr Ser Asn Tyr Pro Leu Thr Phe Gly Gly Gly Thr 225 230 235 240

Lys Leu Glu Ile Lys Arg 245

<210> 1921

<211> 251 <212> PRT

<213> Homo sapiens

<400> 1921

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1  $\phantom{-}$  10  $\phantom{-}$  15

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu 50 60

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Val Thr Ser Leu Tyr Ser Ser Ser Ser Gly Gly Tyr Tyr Tyr  $100 \\ 0.05$ 

Tyr Gly Met Asp Val Trp Gly Arg Gly Thr Thr Val Thr Val Ser Ser 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp 130 135 140

Ile Gln Met Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly Asp

145 150 155 160

Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Asn Asn Tyr Leu 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Arg Ala Pro Lys Leu Leu Ile Tyr 180 185 190

Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser 195 \$200\$

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu  $210 \,$   $\,$   $215 \,$   $\,$   $220 \,$ 

Asp Phe Ala Thr Tyr Tyr Cys Leu Gln Asp Ser Asp Tyr Pro Leu Thr 225 230 235

Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg 245 250

<210> 1922

<211> 239 <212> PRT

<213> Homo sapiens

<400> 1922
Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu Val Gln Pro Gly Gly
1
5
10
15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr \$20\$

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Gly Trp Arg Gly Val Asp Tyr Trp Gly Arg Gly Thr Leu Val

Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
115 120 125

Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Thr Leu Ser Ala 130 . 135 140

Ser Ile Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Glu Gly Ile 145 150 150 160

Tyr His Trp Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys 165 170 175

Leu Leu Ile Tyr Lys Ala Ser Ser Leu Ala Ser Gly Ala Pro Ser Arg \$:\$ 180 \$ 185 \$ 190 \$

Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser

Leu Gln Pro Asp Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Asn 210 215 220

Tyr Pro Leu Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg 225  $\phantom{\bigg|}230\phantom{\bigg|}$  235

<210> 1923

<211> 247

<212> PRT

<213> Homo sapiens

<400> 1923

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80

Leu Gln Met As<br/>n Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Ala Gly Gly Asn Pro Arg Ser Gly Ser Leu Val Tyr Phe Asp 100 \$105\$

Tyr Trp Gly Arg Arg Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln Met Thr 130 140

Gln Ser Pro Ser Thr Leu Ser Ala Ser Ile Gly Asp Arg Val Thr Ile 145 150 155 160

Thr Cys Arg Ala Ser Glu Gly Ile Tyr His Arg Leu Ala Trp Tyr Gln \$165\$ \$170\$

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Val Tyr Lys Ala Ser Ser 180 185 190

Leu Ala Ser Gly Ala Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr 195  $\phantom{\bigg|}200\phantom{\bigg|}$ 

Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Asp Asp Phe Ala Thr 210 215 220

Tyr Tyr Cys Gln Gln Tyr Ser Asn Tyr Pro Leu Thr Phe Gly Gly Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Thr Lys Leu Lys Ile Lys Arg 245

<210> 1924

<211> 244 <212> PRT

<213> Homo sapiens

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Gln Glu Leu Val \$35\$

Ser Ala Ile Ser Gly Ser Gly Gly Ser Ala Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Gly Leu Asp Val Tyr Ala Ile Tyr Gly Leu Asp Val Trp Gly 100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala 130 \$135\$

Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp 145 150 155 .

Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln 165 \$170\$

Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile 180 185 190

Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr 195 200 205

Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys His Ser 210 \$215\$

Arg Asp Ser Ser Gly Asn His Val Leu Phe Gly Gln Gly Thr Lys Leu 225  $\phantom{\bigg|}230\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}$  240

Glu Ile Lys Arg

<210> 1925 <211> 254 <212> PRT

<213> Homo sapiens

<400> 1925

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg 1 5 10 15

Ser Leu Arg Leu Ser Cys Glu Ala Ser Gly Phe Thr Phe Ser Ser Tyr
20 25 30

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ala Val Ile Ser Tyr Asp Glu Arg Ile Lys Asn Tyr Gly Asp Ser Val $_{50}$ 

Lys Gly Arg Phe Thr Gly Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 75 80

Leu Glu Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Thr Glu Val Arg Asn Tyr Asp Leu Leu Thr Arg Ser Tyr Leu Ala 100 105 - 110

Gly Pro Leu Asp Asn Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser 115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln 130 135 140

Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser 145  $$150\$ 

Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn 165 \$170\$

Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met 180 \$180\$

Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Ser Arg Phe Ser 195 200 205

Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln 210 215 220

Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser 225 230 230 240

Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 . 250

<210> 1926

<211> 245 <212> PRT

<213> Homo sapiens

<400> 1926

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Arg

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr 20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val 50 55 60 ·

Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Thr Tyr Tyr Cys  $85 \hspace{0.5cm} 90 \hspace{0.5cm} 95$ 

Ala Arg Glu Ile Gly Trp Glu Gly Ala Phe Asp Ile Trp Gly Arg Gly 100 105 110

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly I15 120 125

Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Pro Ser Val

Ser Ala Ala Pro Gly Gln Lys Val Thr Ile Ser Cys Ser Gly Ser Thr 145 150 155 160

Ser Asn Ile Gly Asn Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly
165 170 175

Lys Ala Pro Lys Leu Met Ile Tyr Asp Val Ser Lys Arg Pro Ser Gly

180 185 190

Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Asn Ser Ala Ser Leu

Asp Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala 210 215 220

Ala Trp Asp Asp Ser Leu Ser Glu Phe Leu Phe Gly Thr Gly Thr Lys 225 230 235 240

Leu Thr Val Leu Gly 245

<210> 1927

<211> 243 <212> PRT

<213> Homo sapiens

...

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Pro Cys Lys Ala Ser Gly Gly Ser Phe Arg Lys Tyr 20 25 30

Gly Phe Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Gly Ile Val Pro Ile Tyr Arg Ala Thr Asn Tyr Ala Gln Lys Phe 50 60

Arg Asp Arg Leu Thr Ile Thr Ala Asp Asp Ala Thr Asn Thr Val Tyr 65 70 75 80

Met Asp Leu Arg Ser Leu Gly Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Thr Val Arg Pro Gly Leu Met Asp Val Trp Gly Gln Gly Thr Thr  $100 \,$   $\,$   $\,$  105  $\,$   $\,$  110  $\,$ 

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Pro Pro Val Phe Ala 130 135 140

Ala Pro Gly Gln Lys Val Thr Ile Ser Cys Ser Gly Ser Thr Ser Asn 145 150 155 Ile Gly Asn Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala 165 170 175 Pro Lys Leu Met Ile Tyr Asp Val Ser Lys Arg Pro Ser Gly Val Pro 180 185 190 Asp Arg Phe Ser Gly Ser Lys Ser Gly Asn Ser Ala Ser Leu Asp Ile 195 200 Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp 210 215 220 Asp Asp Ser Leu Ser Glu Phe Leu Phe Gly Thr Gly Thr Lys Leu Thr 225 230 235 240 Val Leu Gly <210> 1928 <211> 247 <212> PRT <213> Homo sapiens <400> 1928 Gln Val Thr Leu Lys Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg 1 5 10 Ser Leu Arg Leu Ser Cys Ala Ala Ser Lys Phe Thr Phe Arg Asn Tyr 25 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ala Gly Ile Trp Phe Asp Gly Ser Lys Thr Phe Tyr Ser Asp Ser Val 55

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Phe Cys 85 90 95

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Met Tyr

Ala Lys Glu Ala Tyr Thr Ser Ser Trp Ala Glu Phe Asp Phe Trp Gly  $100 \,$   $105 \,$   $110 \,$ 

Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Pro 130 135

Ser Val Ser Ala Ala Pro Gly Gln Lys Val Thr Ile Ser Cys Ser Gly 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}$ 

Ser Thr Ser Asn Ile Gly Asn Asn Tyr Val Ser Trp Tyr Gln Gln His 165 170 175

Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Asp Val Ser Lys Arg Pro 180 185 190

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Asn Ser Ala 195 200 205

Ser Leu Asp Ile Ser Gly Leu Arg Ser Glu Asp Glu Ala Asp Tyr Tyr 210 215 220

Cys Ala Ala Trp Asp Asp Ser Leu Ser Glu Phe Leu Phe Gly Thr Gly 225 230 235

Thr Lys Leu Thr Val Leu Gly

<210> 1929

<211> 243 <212> PRT

<213> Homo sapiens

<400> 1929

Arg Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Glu 1 5 10 15

Ser Leu Arg Leu Ser Cys Ser Ala Ser Gly Phe Thr Phe Ser Ser Tyr \$20\$

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

Ser Gly Ile Ser Gly Ser Gly Ser Ser Thr Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Met Leu Tyr  $_{65}$   $\phantom{0}$  70  $\phantom{0}$  75  $\phantom{0}$  . 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Ile Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Lys Asn Ile Thr Pro Leu Ala Met Val Gly Asp Phe Trp Gly Arg 100 105 110

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val 130 \$135\$

Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser 145 \$150\$

Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala 165 170 175

Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro 180 185 190

Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile 195  $\phantom{\bigg|}200\phantom{\bigg|}$ 

Thr Gly Alá Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg 210 215 220

Asp Ser Ser Gly Asn His Val Val Phe Gly Gly Gly Thr Lys Leu Thr 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$  240

Val Leu Glv

<210> 1930

<211> 240

<212> PRT <213> Homo sapiens

<400> 1930

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly

5 10 1 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asn Ser Tyr 20 25 Ala Met Ser Trp Val Arq Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 40 Ser Ser Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val 55 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 70 75 Leu Gln Met Asn Ser Leu Arg Val Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ser Leu Ile Glu Asp Phe Trp Gly Arg Gly Thr Leu Val Thr Val 105 Ser Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly 120 Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly 135 Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly 145 Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg 185 180 Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly 195 200

Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr 210 215 220

Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 225 230 235 240

<210> 1931 <211> 238 <212> PRT

<213> Homo sapiens

<400> 1931

Gin Val Gln Leu Ala Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 20 25 30

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val \$35\$ 40 45

Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Ser Asp Ser Gly Ser Pro Asp Trp Gly Lys Gly Thr Leu Val Thr 100 \$105\$

Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly

Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr 145 \$150\$ 150 \$155\$

Ala Gly Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile 165 170 175

Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly 180 185 190

Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala 195 200 205

Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn

210 215 220

His Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 225 230 235

<210> 1932

<211> 241

<212> PRT <213> Homo sapiens

<400> 1932

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly

Ser Leu Arg Leu Ser Cys Glu Ala Ser Gly Phe Thr Phe Ser His Tyr

Trp Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Ala Val  $_{\rm 35}$   $_{\rm 40}$   $_{\rm 45}$ 

Ala Ser Ile Lys Arg Asp Gly Ser Gln Gln Tyr Tyr Leu Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Ser 65 70 75 80

Leu Gln Met Ser Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Glu Gly Val Ala Ala Gly Glu Asp Tyr Trp Gly Gln Gly Thr  $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser 115 120 125

Gly Gly Gly Gly Ser Asp Val Val Met Thr Gln Ser Pro Ser Ser Val 130 135

Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  160

Gly Ile Ser Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala \$165\$ \$170\$

Pro Lys Leu Leu Ile Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro 180 185 190

Ser Arg Phe Ser Gly Gly Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile 195  $\phantom{\bigg|}200\phantom{\bigg|}$  200  $\phantom{\bigg|}205\phantom{\bigg|}$ 

Ser Thr Leu Gln Pro Glu Asp Val Ala Thr Tyr Tyr Cys Glu Asn Tyr 210 215 220

Asn Ser Val Pro Leu Ser Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys 225 230 235 240

Arg

<210> 1933

<211> 244 <212> PRT

<213> Homo sapiens

<400> 1933

Gly Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 20 25 30

Ala Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ala Val Val Ser Tyr Asp Gly Ser Lys Lys Tyr Tyr Gly Asp Ser Val 50 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asp Ser Leu Tyr  $_{65}$   $\phantom{0}$  70  $\phantom{0}$  70  $\phantom{0}$  80

Leu Gln Met Asn Asn Leu Arg Val Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Glu Lys Arg Gly Ser Arg Arg Val Phe Asp Ile Trp Gly Gln 100 105 110

Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Asp Pro Ala 130 135 140

Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp 145 150 150

Ser Leu Arg Ser Tyr Tyr Thr Asn Trp Phe Gln Gln Lys Pro Gly Gln 165 \$170\$

Ala Pro Leu Leu Val Val Tyr Ala Lys Asn Lys Arg Pro Ser Gly Ile 180 185 190

Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr 195 \$200\$

Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser 210 215 220

Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly Gly Thr Lys Leu 225 230 235 240

Thr Val Leu Gly

<210> 1934

<211> 247 <212> PRT

<213> Homo sapiens

<400> 1934

Gln Val Thr Leu Lys Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg

Ser Leu Arg Leu Ser Cys Ala Ala Ser Lys Phe Thr Phe Arg Asn Tyr  $$20_{\odot}$$ 

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ala Gly Ile Trp Phe Asp Gly Ser Lys Thr Phe Tyr Ser Asp Ser Val $_{50}$ 

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Met Tyr  $65 \phantom{000} 70 \phantom{000} 75 \phantom{000}$ 

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Phe Cys 85 90 95

Arg Gly Thr Pro Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly .

Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Pro 130 135 140

Ser Val Ser Ala Ala Pro Gly Gln Lys Val Thr Ile Ser Cys Ser Gly 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}$ 

Ser Thr Ser Asn Ile Gly Asn Asn Tyr Val Ser Trp Tyr Gln Gln His 165  $$170\$ 

Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Asp Val Ser Lys Arg Pro  $180 \ \ \, 185 \ \ \,$ 

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Asn Ser Ala 195 200 205

Ser Leu Asp Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr  $210 \\ \hspace*{1.5cm} 215 \\ \hspace*{1.5cm} 220 \\ \hspace*{1.5cm}$ 

Cys Ala Ala Trp Asp Asp Ser Leu Ser Glu Phe Leu Phe Gly Thr Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}$ 

Thr Lys Leu Thr Val Leu Gly 245

<210> 1935

<211> 243

<212> PRT

<213> Homo sapiens

<400> 1935

Gln Val Thr Leu Lys Glu Ser Gly Gly Gly Leu Ile Gln Pro Gly Gly 1

Pro Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 20 25 30

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ala Phe Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val

50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$ 90 95

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly 115 \$120\$

Gly Ser Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser 130 140

Thr Leu Ser Ala Ser Ile Gly Asp Arg Val Thr Ile Thr Cys Arg Ala 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  160

Ser Glu Gly Ile Tyr His Trp Leu Ala Trp Tyr Gln Gln Lys Pro Gly 165 170 175

Lys Ala Pro Lys Leu Leu Ile Tyr Lys Ala Ser Ser Leu Ala Ser Gly 180 185 190

Ala Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu
195 200 205

Thr Ile Ser Ser Leu Gln Pro Asp Asp Phe Ala Thr Tyr Tyr Cys Gln 210 215 220

Gln Tyr Ser Asn Tyr Pro Leu Thr Phe Gly Gly Gly Thr Lys Leu Glu 225 230 235 240

Ile Lys Arg

<210> 1936 <211> 253 <212> PRT

<213> Homo sapiens

<400> 1936 Gln Val Asn Leu Arg Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 20 \$25\$

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$ . 40 45

Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe  $50 \ \ 55 \ \ - \ \ 60$ 

Gln Gly Arg Val Thr Ile Thr Arg Asp Thr Ser Ala Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Ala Arg Asp Tyr Tyr Asp Ser Ser Gly Tyr Tyr Val Pro Asp 100 105 110

Ala Phe Asp Ile Trp Gly Lys Ser Thr Leu Val Thr Val Ser Ser Gly 115 \$120\$

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser 130 140

Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln Lys Val 145 150 155 160

Thr Ile Ser Cys Ser Gly Ser Thr Ser Asn Ile Gly Asn Asn Tyr Val \$165\$

Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr 180 185 190

Asp Val Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser 195  $200\,$  205

Lys Ser Gly Asn Ser Ala Ser Leu Asp Ile Ser Gly Leu Gln Ser Glu 210 215 220

Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu Ser Glu 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Phe Leu Phe Gly Thr Gly Thr Lys Leu Thr Val Leu Gly

245 250

<210> 1937 <211> 241

<212> PRT

<213> Homo sapiens

<400> 1937

Ala Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Lys Ser Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 20 25 30

Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  $_{\rm 35}$   $_{\rm 40}$   $_{\rm 45}$ 

Ser Ser Ile Ser Ser Ser Ser Ser Tyr Ile Tyr Tyr Ala Asp Ser Val\$50\$ \$55\$ \$60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr  $_{65}$   $_{70}$   $_{70}$   $_{75}$   $_{80}$ 

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly His Phe Tyr Gly Met Asp Val Trp Gly Arg Gly Thr Met 100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly 115 \$120\$

Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala 130 135 140

Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser 145 \$150\$

Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu \$165\$ \$170\$ \$175\$

Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe 180 180 185

Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala 195 \$200\$

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser 210 215 220

Ser Thr His Arg Gly Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu 225 230 235 240

Gly

<210> 1938

<211> 253

<212> PRT

<213> Homo sapiens

<400> 1938

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Lys Pro Gly Gly 1  $\phantom{-}$  10  $\phantom{-}$  15

Ser Leu Arg Val Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Ala \$20\$ \$25\$ \$30

Trp Met Tyr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Arg Ile Arg Ser Lys Gly Asp Gly Gly Thr Ala Asp Tyr Ala Ala 50  $\,$  55  $\,$  60  $\,$ 

Pro Val Glu Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Tyr Thr  $_{65}$   $\phantom{0}$  75  $\phantom{0}$  80

Leu Tyr Leu Gln Met Asn Ser Leu Lys Ser Glu Asp Thr Ala Val Tyr 85 90 95

Tyr Cys Met Ser Leu Pro Pro Asp Leu Arg Tyr Cys Asp Gly Gly Met 100 \$105\$

Cys Ser Gly Phe Asp Trp Leu Gly Pro Trp Gly Gln Gly Thr Leu Val

Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly 130 135 140

Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu 145 \$150\$ 150 155 .

Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr 165 170 Tyr Ala Ser Trp His Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val 180 185 Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser 195 200 205 Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln 215 220 Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ala Trp Asp Ser Ser His 235 Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250 <210> 1939 <211> 247 <212> PRT <213> Homo sapiens <400> 1939 Gln Val Gln Leu Met Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg 5 10 15 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 20 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 40 Ala Val Ile Ser Tyr Asp Gly Ser Ile Lys Tyr Tyr Ala Asp Ser Val 55 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Phe 70 75 80 Leu Gln Met Asn Ser Leu Arg Thr Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Glu Ser Leu Leu Thr Glu Glu Tyr Cys Gly Ser Asp Cys Tyr

Ser Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr Gln 130 135 140

Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys 145 150 155 160

Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys  $165 \hspace{1.5cm} 170 \hspace{0.5cm} - \hspace{0.5cm} 170 \hspace{0.5cm} - \hspace{0.5cm} 175 \hspace{0.5cm}$ 

Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Thr 180  $$185\$ 

Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala 195  $\phantom{\bigg|}200\phantom{\bigg|}$ 

Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr 210 215 220

Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly Gly 225 230 235

Thr Lys Leu Ser Val Leu Gly 245

<210> 1940 <211> 243

<211> 243 <212> PRT

<213> Homo sapiens

<400> 1940

Gln Met Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr \$20\$

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

Ser Ala Ile Asn His Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Thr Lys Asn Thr Leu Ser

55 70 75 80
Leu Gln Met Asn Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys

85 90 95

Val Pro Asn Ser Ala Pro Pro Ala Pro Ser Met Asp Val Trp Gly Arg 100 105 110

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val 130 135

Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser 145 150 155 160

Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala 165 170 175

Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro 180 185 190

Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile 195 \$200\$

Thr Gly Ala Glu Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg 210 215 220

Asp Ser Ser Gly Asn His Val Val Phe Gly Gly Gly Thr Lys Leu Thr 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Val Leu Gly

<210> 1941

<211> 237 <212> PRT

<213> Homo sapiens

<400> 1941 Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val His Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Phe  $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$ 

Ala Leu Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Val 3.5 4.0 Ser Ser Ile Ser Pro Ser Gly Gly Arg Thr Tyr Tyr Ala Asp Ser Val Glu Gly Arq Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Leu Val Tyr Leu Gln Met Asn Ser Leu Arg Val Asp Asp Thr Ala Val Tyr Phe Cys 8.5 90 Ala Ser Arg Tyr Tyr Asp Tyr Trp Gly Arg Gly Thr Leu Val Thr Val 100 105 Ser Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly 115 120 Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln 135 130 Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala 145 150 155 Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr 170 165 Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser 180 185 Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu 205 195 200 Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His 215 Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 230 235 <210> 1942 <211> 243 <212> PRT

2311

<213> Homo sapiens

<400> 1942 Gln Val Gln Leu Val Gln Ser Gly Glu Gly Leu Val Gln Pro Gly Glu 1 5 10 15

Ser Leu Arg Leu Ser Cys Ser Ala Ser Gly Phe Thr Phe Ser Ser Tyr

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ser Gly Ile Ser Gly Ser Gly Ser Ser Thr Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Met Leu Tyr  $_{65}$   $\phantom{0}75$   $\phantom{0}75$ 

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Ile Tyr Tyr Cys 85 90 95

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly 115  $\cdot$  120 125

Gly Ser Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val 130 \$135\$

Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  160

Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala 165 170 175

Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro 180 185 190

Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile 195 200 205

Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg 210  $\phantom{-}215\phantom{+}220\phantom{+}$ 

Asp Ser Ser Gly Asn His Val Val Phe Gly Gly Gly Thr Lys Leu Thr 225 230 235 240

Val Leu Gly

<210> 1943

<211> 243

<400> 1943

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Ala Gly Glu 1 5 10 15

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe Thr Ser Tyr 20 25 30

Gly Ile Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Trp Ile Ser Gly Tyr Asn Ala Asn Thr Thr Tyr Ala Gln Asn Leu 50

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Ala Asp Tyr Ser Asn Asp Tyr Tyr Met Asp Val Trp Gly Lys  $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser 130 140

Ser Glu Gly Ile Tyr His Trp Leu Ala Trp Tyr Gln Gln Lys Pro Gly

Lys Ala Pro Lys Leu Leu Ile Tyr Lys Ala Ser Ser Leu Ala Ser Gly 180 185 190

Ala Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu 195 200 205

Thr Ile Ser Ser Leu Gln Pro Asp Asp Phe Ala Thr Tyr Tyr Cys Gln 210 215 220

Gln Tyr Ser Asp Tyr Pro Leu Thr Phe Gly Gly Gly Thr Lys Leu Glu 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Ile Lys Arg

<210> 1944

<211> 243 <212> PRT

<213> Homo sapiens

<400> 1944

Arg Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Glu 1 5 10 15

Ser Leu Arg Leu Ser Cys Ser Ala Ser Gly Phe Thr Phe Ser Ser Tyr 20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ser Gly Ile Ser Gly Ser Gly Ser Ser Thr Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Met Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Ile Tyr Tyr Cys 85 90 95

Ala Lys Asn Ile Thr Pro Leu Ala Met Val Gly Asp Phe Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val

Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser 145 155

Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala 165 170 175

Pro Val Leu Val Ile Tyr Gly Lys Asn Ile Arg Pro Ser Gly Ile Pro 185

Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile

Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg 210 215

Asp Ser Ser Gly Asn His Val Val Phe Gly Gly Gly Thr Lys Leu Thr 230 235

Val Leu Glv

<210> 1945 <211> 243

<213> Homo sapiens

<400> 1945

Gln Val Gln Leu Gln Gln Ser Gly Gly Leu Val Gln Pro Gly Gly 5 1.0

Ser Leu Arg Leu Ser Cys Ser Ala Ser Gly Phe Thr Phe Ser Ser Tyr 20 25

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Tyr Val 40

Ser Ala Ile Ser Ser Asn Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val 55

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 75 70

Leu Gln Met Ser Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 an.

Ala Arg Phe Pro Leu Glu Ser Tyr Tyr Tyr Met Asp Val Trp Gly Gln

100 105 110

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly

Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser

Thr Leu Ser Ala Ser Ile Gly Asp Arg Val Thr Ile Thr Cys Arg Ala 145 \$150\$

Ser Glu Gly Ile Tyr His Trp Leu Ala Trp Tyr Gln Gln Lys Pro Gly 165 170 175

Ala Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu 195  $\phantom{\bigg|}200\phantom{\bigg|}$  205

Thr Ile Ser Ser Leu Gln Pro Asp Asp Phe Ala Thr Tyr Tyr Cys Gln 210  $\,$  215  $\,$  220  $\,$ 

Gln Tyr Ser Asn Tyr Pro Leu Thr Phe Gly Gly Gly Thr Lys Leu Glu 225 230 235 240

Ile Lvs Arg

<210> 1946 <211> 245 <212> PRT <213> Homo sapiens

<213> Homo sapiens

Cauus 1946 Glu Val Gln Leu Val Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 15 10

Ser Val Arg Val Ser Cys Glu Ala Ser Gly Tyr Thr Phe Thr Gly Tyr  $20 \ 25 \ 30$ 

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Trp Ile Asn Pro Asp Ser Gly Lys Thr Lys Tyr Ala Gln Lys Phe 50 60

Gln 65	Gly	Arg	Val	Thr	Met 70	Thr	Arg	Asp	Thr	Ser 75	Ile	Ser	Thr	Ala	Tyr 80			
Met	Glu	Leu	Ser	Arg 85	Leu	Arg	Ser	Asp	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys			
Ala	Arg	Gly	Asn 100	Ser	Phe	Gly	Arg	Thr 105	Leu	Asp	Tyr	Trp	Gly 110	Arg	Ser			
Thr	Leu	Val. 115		Val	Ser	Ser	Gly 120	Gly	Gly	Gly	Ser	Gly 125	Gly	Gly	Gly			
ser	Gly 130	Gly	Gly	Gly	Ser	Gln 135	Ser	Val	Leu	Thr	Gln 140	Pro	Ala	Ser	Val			
ser 145	Gly	Ser	Pro	Gly	Gln 150	Ser	Ile	Thr	Ile	Ser 155	Cys	Thr	Gly	Thr	Serv 160			
Ser	Asp	Val	Gly	Gly 165		Asn	Tyr	Val	Ser 170		Tyr	Gln	Gln	His 175	Pro			
Gly	Lys	Ala	Pro 180	Lys	Ьeu	Met.	Ile	Tyr 185	Glu	Gly	Ser	Lys	Arg 190	Pro	Ser			
Gly	Val.	Ser 195	Asn	Arg	Phe	Ser	Gly 200	Ser	Lys	Ser	Gly	Asn 205	Thr	Ala	Ser			
Leu	Thr 210	Ile	Ser	Gly	Leu	Arg 215	Ala	Glu	Asp	Glu	Ala 220	Asp	Tyr	Tyr	Cys			
Ser 225	Ser	Tyr	Thr	Thr	Arg 230	Ser	Thr	Arg	Val	Phe 235	Gly	Gly	Gly	Thr	Lys 240	•		
Leu	Thr	Val	Leu	Gly 245														
<213	0 > 1: 1 > 2: 2 > PI 3 > Ho	43 RT	sapi	ens														
	0> 1: Val		Leu	Val 5	Gln	Ser	Gly	Ala	Glu 10	Val	Ьуs	Lys	Pro	Gly 15	Ala			
	2317																	

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 20 25 30

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Ile Ile Asn Pro Ser Gly Gly Ser Thr Ser Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr  $65 \hspace{1cm} 70 \hspace{1cm} 75 \hspace{1cm} 80 \hspace{1cm}$ 

Met Glu Leu Ser Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Val Pro Pro Pro Asp Gly Tyr Leu Glu Val Trp Gly Arg

Gly Thr Met Val Thr Val Ser Asn Gly Gly Gly Gly Ser Gly Gly Gly Gly 115 120 . 125

Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val

Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser 145 \$150\$

Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala 165 170 175

Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro \$180\$ . \$180

Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile 195 \$200\$

Asp Ser Ser Gly Asn His Val Val Phe Gly Gly Gly Thr Lys Leu Thr 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Val Leu Gly

<210> 1948 <211> 241 <212> PRT <213> Homo sapiens <400> 1948 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 5 Ser Val Lys Val Ser Cys Arg Ala Ser Gly Tyr Ser Phe Thr Gly Tyr 20 25 Tyr Ile His Trp Val Arg Arg Ala Pro Gly Gln Gly Leu Glu Trp Leu 4.0 Gly Trp Ile Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe 50 55 60 Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr 70 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 95 85 90 Ala Arg Ala Ser Tyr Pro Val Pro Phe Asp Tyr Trp Gly Lys Gly Thr 105 Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Thr Leu 135 Ser Ala Ser Ile Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Glu Gly Ile Tyr His Trp Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala 170 175 165 Pro Lys Leu Leu Ile Tyr Lys Ala Ser Ser Leu Ala Ser Gly Ala Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile 195 200

Ser Ser Leu Gln Pro Asp Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr 210 215 220

Ser Asn Tyr Pro Leu Thr Phe Gly Gly Gly Thr Lys Leu Glu Thr Glu 225  $\phantom{\bigg|}230\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}$ 

Arq

<210> 1949 <211> 242

<212> PRT

<213> Homo sapiens

<400> 1949

Gln Leu Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Phe Thr Phe Thr Thr Tyr

Pro Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ser Val Met Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$

Ala Lys Gly Gly Trp Leu Asp Asp Trp Gly Gln Gly Thr Met Val Thr
100 105 110

Val Ser Ser Gly Gly Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Gly 115 \$120\$

Gly Ser Ala Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala 130 140

Pro Gly Gln Glu Val Thr Met Ser Cys Ser Gly Ser Ser Ser Asn Val 145 150 155 160

Gly His Asn Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro  $_{165}$   $_{170}$   $_{175}$ 

Lys Leu Ile Tyr Asp Asp Asp Lys Arg Pro Ser Gly Ile Pro Asp 180 185 190

Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Thr Leu Ala Ile Arg 195 200 205

Gly Leu Gln Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Ala Thr Trp Asp 210 215 220

Val Arg Leu Arg Asp Val Leu Phe Gly Gly Gly Thr Lys Leu Thr Val 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Leu Gly

<210> 1950

<211> 245

<212> PRT <213> Homo sapiens

<400> 1950

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ala Ser Tyr

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val

Gly Ile Ile Asn Pro Ser Gly Gly Lys Thr Thr Tyr Ala Gln Asn Phe 50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Ser 65 70 75 80

Met Glu Leu Asn Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{0.25in} 90 \hspace{0.25in} 95$ 

Ala Arg Glu His Ser Ser Ser Phe Asp Tyr Trp Gly Gln Gly Thr Met 100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly

115 120 125

Gly Gly Ser Ala Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser 130 135 140

Gly Ala Pro Gly Gln Arg Val Thr Ile Ser Cys Thr Gly Ser Ser Ser 145 150 155

Asn Ile Gly Asp Gly Tyr Asp Val His Trp Tyr Gln Gln Leu Pro Gly 165 170 170

Thr Ala Pro Lys Leu Leu Ile Tyr Gly Asn Gly His Arg Pro Ser Gly 180 185 190

Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Asp Thr Ser Ala Ser Leu 195 200 205

Ala Ile Thr Gly Leu Gln Val Glu Asp Glu Ala Asp Tyr Phe Cys His 210 215 220

Ser Tyr Asp Ser Ser Val Ser Gly Trp Ile Phe Gly Gly Gly Thr Lys 225 230 235 240

Val Thr Val Leu Gly 245

<210> 1951

<211> 253 <212> PRT

<213> Homo sapiens

<400> 1951

Glu Val Gln Leu Val Gln Ser Gly Ala Ala Val Lys Lys Pro Gly Ala

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Thr Tyr 20 25 30 .

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Ile Ile Asn Pro Ile Asn Gly Asn Thr Ile Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Gly Thr Val Asn  $65\cdot 75$  75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Phe Tyr Cys 85 90 95

Ala Arg Glu Gly Glu Gly Asp Gly Tyr Asn Val Ala Pro Tyr Tyr Phe  $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Asp Tyr Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ala Val 130  $$135\$ 

Leu Thr Gln Pro Ser Ser Val Ser Gly Ala Pro Gly Gln Arg Val Thr 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  160

Ile Ser Cys Thr Gly Ser Ser Ser Asn Ile Gly Ala Gly Tyr Asp Val 165 170 175

His Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr 180 185 190

Gly Asn Ser Asn Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser 195 200 205

Lys Ser Asp Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln Val Glu 210 220

Asp Glu Ala Asp Tyr Phe Cys His Ser Tyr Asp Ser Ser Leu Ser Gly
225 230 235 240

Trp Ile Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly \$245\$

<210> 1952 · <211> 250

<211> 250 <212> PRT

<213> Homo sapiens

<400> 1952

Glu Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Arg Asp Tyr \$20\$

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 \$40\$

Gly Ile Ile Asn Pro Thr Gly Gly Thr Thr Ser Tyr Ala Pro Lys Phe 50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Asn Thr Leu Tyr 65 70 75 80

Met Glu Leu Arg Arg Leu Lys Phe Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Glu Ala Gly Gly Ser Gly Ser Tyr His Phe Ser Phe Pro Phe 100 105 110

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Leu Glu Thr 130 135 140

Thr Leu Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly Glu Arg 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn Leu Ala 165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly  $180 \hspace{1cm} 185 \hspace{1cm} 190 \hspace{1cm}$ 

Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly 195 200 205

Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser Glu Asp 210 215 220

Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Trp Pro Arg Thr Phe 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg 245 250

<210> 1953 <211> 247

<212> PRT <213> Homo sapiens

<400> 1953

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Trp 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Tyr Ser  $20 \ 25 \ 30$ 

Ala Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val \$35\$ \$40\$

Ser Ala Ile Thr Ser Ser Gly Gly Ala Thr Tyr Tyr Ala Asp Ser Val $_{50}$   $_{60}$ 

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Ile Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Lys Thr Gly Ile Trp Gly Tyr Tyr Phe Asp Tyr Trp Gly Gln Gly 100 \$105\$

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly 115 \$120\$

Ser Gly Gly Gly Ser Ala Gln Ser Val Leu Thr Gln Pro Pro Ser 130 140

Val Ser Gly Ala Pro Gly Gln Arg Val Thr Ile Ser Cys Thr Gly Arg 145 \$150\$

Ser Ser Asn Ile Gly Ala Gly Phe Asp Val His Trp Tyr Leu Gln Leu 165 \$170\$

Pro Gly Arg Ala Pro Lys Val Leu Ile Tyr Gly Asn Ser Asn Arg Pro 180 185 190

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala 195 200 205

Ser Leu Ala Ile Thr Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr 210 215 220

Cys Gln Ser Tyr Asp Arg Ser Leu Arg Ala Phe Val Phe Gly Thr Gly 225 230 235 240

Thr Lys Val Thr Val Leu Gly 245

<210> 1954

<211> 252 <212> PRT

<213> Homo sapiens

<400> 1954

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Phe Ile His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Ile Ile Asn Pro Asn Gly Gly Ile Thr Lys Tyr Lys Glu Ser Phe 50 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Asn Thr Leu Tyr 65 70 75 80

Met Glu Met Arg Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Gly Asn Leu Asn Tyr Asp Gly Ser Thr Asp Tyr Gly Met \$100\$

Asp Val Trp Gly Arg Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly 115 \$120\$

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln Ala Val 130 135 140

Leu Thr Gln Pro Ser Ser Ala Ser Gly Thr Leu Gly Gln Arg Leu Ser 145 \$150\$

Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn Ser Val Ser 165  $$170\$ 

Trp Tyr His Gln Val Ala Gly Thr Ala Pro Lys Leu Leu Ile Tyr Gly
180 185 190

Ser Asp Glu Arg Pro Ser Gly Val Pro Tyr Arg Phe Ser Gly Ser Lys

Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Glu Leu Arg Ser Glu Asp 210 215 220

Glu Gly Asp Tyr Tyr Cys Ala Thr Trp Asp Asp Ser Leu Arg Gly Trp 225 230 235 240

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly \$245\$

<210> 1955

<211> 248

<212> PRT <213> Homo sapiens

<400> 1955

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ser Ser Gly Gly Thr Phe Ser Ser Tyr

Ala Leu Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $^{\rm 35}$ 

Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr  $_{65}$   $\phantom{0}$  70  $\phantom{0}$  75  $\phantom{0}$  80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Thr Thr Leu Gly Arg Asn Tyr Thr Ser Ser Trp Ser Leu Asp Tyr Trp

Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly 115 120 125

Gly Gly Gly Ser Gly Gly Gly Ser Ala Leu Ser Ser Glu Leu Thr

130 135 140

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145 150 155 160

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln
165 170 175

Lys Pro Arg Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asp Arg 180 185 190

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Asn Ser Gly Asn Thr 195 200 205

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Asn Ser Arg Asp Thr Ser Gly Asn His Leu Val Phe Gly Thr 225 230 235 240

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1956

<211> 249

<212> PRT <213> Homo sapiens

<400> 1956

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Fhe Thr Ser Tyr

Gly Met His Trp Val Arg Gln Ala Pro Ala Lys Gly Leu Glu Trp Val 35 40 45

Ala Phe Ile Ser Tyr Asp Gly Ser His Lys Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80

Ala Lys Val Val Gly Gly Tyr Ser Ser Thr Leu Gly Thr Asp Val Trp 100 . 105 Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Ser Gly 115 120 Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln Ala Val Leu Thr Gln 130 135 140 Pro Ser Ser Ala Ser Gly Thr Pro Gly Glm Arg Val Thr Ile Ser Cys 150 Ser Gly Arg Asn Ser Asn Val Gly Ser Asn Tyr Val Tyr Trp Tyr Gln 170 Gln Phe Pro Gly Thr Ala Pro Lys Leu Leu Ile His Arg Ser Asn Gln . 180 Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr 200 Ser Ala Ser Leu Ala Ile Ser Gly Leu Arg Ser Glu Asp Glu Ala Ala 215 Tyr Tyr Cys Ala Thr Trp Asp Asp Ser Leu Ser Val Trp Val Phe Gly 230 235 Gly Gly Thr Lys Leu Thr Val Leu Gly 245 <210> 1957 <211> 249 <212> PRT <213> Homo sapiens <400> 1957 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu 5 10 . 15 Ser Leu Lys Ile Ser Cys Lys Gly Tyr Gly Tyr Asn Phe Lys Gly His 20 25

2329

Trp Ile Val Trp Val Arg Gln Val Pro Gly Lys Gly Leu Asp Tyr Met

40

Gly Ile Ile Tyr Pro Asp Asp Ser Ser Thr Thr Tyr Arg Pro Ser Phe 50 55 60

Gln Gly Gln Val Thr Ile Ser Val Asp Lys Ser Thr Ser Thr Ala Tyr  $_{65}$   $\phantom{0}70$   $\phantom{0}75$  80

Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys \$85\$

Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Ser Ala Leu Ser Tyr Glu Leu Thr Gln  $130 \,$   $135 \,$   $140 \,$ 

Pro Pro Ser Thr Ser Ala Thr Pro Gly Gln Thr Val Thr Ile Ser Cys 145 150 155 160

Tyr Gly Ser Ser Asp Asn Ile Gly His Glu Arg Val Ala Trp Tyr Gln  $_{165}$   $_{170}$   $_{170}$   $_{175}$ 

His Val Pro Gly Thr Ala Pro Lys Leu Val Ile Tyr Asn Asp Asp Arg 180 \$180\$

Arg Pro Ala Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Asp Ser 195 . 200 205

Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu Gly Asp 210 215 220

Tyr Tyr Cys Ala Ser Trp Asp Val Arg Met Phe Gly Phe Val Phe Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Thr Gly Thr Lys Val Thr Val Leu Gly

<210> 1958

<211> 254 <212> PRT

<213> Homo sapiens

<400> 1958

3ln 1	Val	Gln	Leu	Gln 5	Gln	Ser	Gly	Pro	Gly 10	Leu	Ala	Lys	Pro	Ser 15	Gln
Fhr	Leu	Ser	Gl.y 20	Thr	Cys	Ala	Ile	Ser 25	Gly	Asp	Ser	Val	Ser 30	Ser	Asn
Ser	Ala	Thr 35	Trp	Asn	Trp	Ile	Arg 40	Gln	Ser	Pro	Ser	Arg 45	Gly	Leu	Glu
Trp	Leu 50	Ala	Arg	Thr	Tyr	Tyr 55	Arg	Ser	Thr	Trp	His 60	Asn	Asp	Tyr	Ala
Val 65	Ser	Val	Asn	Ser	Arg 70	Ile	Arg	Val	Asp	Pro 75	Asp	Thr	Ser	Lys	Asn 80
3ln	Phe	Ser	Leu	Leu 85	Leu	Asn	Ser	Val	Thr 90	Pro	Glu	Asp	Thr	Ala 95	Val
Tyr	Phe	Сув	Ala 100	Arg	Ala	Val	Arg	Ser 105	Pro	Gly	Tyr	Tyr	Tyr 110	Tyr	Tyr
Met	Asp	Val 115	Trp	Gly	Gln	Gly	Thr 120	Thr	Val	Thr	Val	Ser 125	Ser	Gly	Gly
Gly	Gly 130	Ser	Gly	Gly	Gly	Gly 135	Ser	Gly	Gly	Gly	Gly 140		Ala	Gln	Ala
Val 145	Leu	Thr	Gln	Pro	Ser 150	Ser	Ala	Ser	Gly	Thr 155	Pro	Gly	Gln	Arg	Val 160
Thr	Ile	Thr	Cys	Ser 165	Gly	Ser	Ser	Ser	Asn 170	Ile	Gly	Ser	Asn	Thr 175	Val.
Asn	Trp	Tyr	Gln 180	Gln	Leu	Pro	Gly	Thr 185	Ala	Pro	Lys	Leu	Leu 190	Ile	Phe
Gly	Asn	Asn 195	Gln	Arg	Pro	Ser	Gly 200	Val	Pro	Asp	Arg	Phe 205	Ser	Gly	Ser
Lys	Ser 210	Gly	Thr	Ser	Ala	Ser 215	Leu	Ala	Ile	Ser	Gly 220	Leu	Gln	Ser	Glu
Asp 225	Glu	Ala	Asp	Tyr	Phe 230	Cys	Ala	Ala	Trp	Asp 235	Asp	Ser	Leu	Asn	Val 240

Pro Trp Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1959

<211> 243 <212> PRT

<213> Homo sapiens

<400> 1959 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr

Pro Val His Trp Leu Arg Gln Ala Pro Gly Gln Arg Pro Glu Trp Val

Gly Gin Phe Asn Pro Ala Thr Gly Asn Thr Gln Tyr Ser Glu Asn Phe

Gln Gly Arg Val Ala Ile Thr Ser Asp Thr Ala Ala Thr Thr Ser Tyr 65 70 75 80

Ala Arg Gly Arg Lys Pro Leu Phe Asp Tyr Trp Gly Arg Gly Thr Leu  $100 \hspace{1cm} 105 \hspace{1cm} 105$ 

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Ala Leu Ser Ser Glu Leu Thr Gln Asp Pro Ala Val

Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser 145 150 155 160

Leu Thr Thr Tyr Tyr Ala Arg Trp Tyr Gln Gln Lys Pro Gly Gln Ala 165 170 175

Pro Leu Leu Val Ile Tyr Gly Arg Asn Asn Arg Pro Ser Gly Ile Pro 180 185 190

Asp Arg Phe Ser Gly Ser Arg Ser Gly Ser Thr Ala Ser Leu Thr Ile 195 200 205

Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg 210 \$215\$

Asp Ser Arg Gly Asn His Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$  240

Val Leu Gly

<210> 1960 <211> 248

<212> PRT

<213> Homo sapiens

<400> 1960

Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln 1  $\phantom{0}$  15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Ala Ser Ile Asn Thr Gly  $20 \\ 20 \\ 25$ 

Gly Tyr Asp Trp Thr Trp Ile Arg Gln His Pro Gly Lys Gly Leu Glu  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Leu Ile Gly His Ile His Tyr Ser Gly Ser Thr Tyr Lys Lys Ala Ser 50 55 60

Leu Lys Ser Arg Leu Asn Met Ser Leu Asp Arg Ser Lys Asn Gln Phe 65 70 75 80

Ser Leu Asn Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Ile Tyr Tyr  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Cys Ala Arg Lys Gln Arg Arg Glu Lys Tyr Phe Asp Tyr Trp Gly Arg

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Ser Ala Gln Ser Val Leu Thr Gln Pro Pro 130  $$135\$ 

Ser Val Ser Gly Ala Pro Gly Gln Lys Val Thr Ile Ser Cys Thr Gly

145 150 155 160

Ser Arg Ser Asn Phe Gly Ala Asp Tyr Asp Val His Trp Tyr Gln Gln 165 \$170\$

Arg Pro Gly Ala Ala Pro Lys Leu Leu Ile Ser Asn Asn Lys Asn Arg 180  $$185\$ 

Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Arg Ser Gly Thr Ser

Ala Ser Leu Thr Ile Thr Gly Val Gln Ser Asp Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Gln Ser Tyr Asp Ser Ser Leu Ser Gly Phe Val Phe Gly Gly 225 230 235 240

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1961

<211> 254

<212> PRT <213> Homo sapiens

-400× 1961

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 20 25 30

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $_{\rm 35}$   $_{\rm 40}$   $_{\rm 45}$ 

Gly Ile Ile Asn Pro Ser Gly Gly Ser Thr Ser Tyr Ala Gln Lys Phe  $_{\rm 50}$ 

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr  $_{65}$   $\phantom{0}$  70  $\phantom{0}$  75  $\phantom{0}$  80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Glu Lys Ala Ile Ile Glu Thr Thr Ser Gly Glu Ala Asp Pro  $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Phe Asp Ile Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ala 130 \$135\$

Val Leu Thr Gln Pro Ser Ser Val Ser Gly Ala Pro Gly Gln Arg Val 145 150 160

Thr Ile Ser Cys Thr Gly Ser Ser Ser Asn Ile Gly Asp Gly Tyr Asp 165 170 175

Val His Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile 180 185 190

Tyr Gly Asn Ser Asn Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly 195 200 205

Ser Lys Ser Asp Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln Val 210 215 220

Glu Asp Glu Ala Asp Tyr Phe Cys His Ser Tyr Asp Ser Ser Val Ser 225 \$230\$ 230 235 .

Gly Trp Ile Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly  $245 \ \ 250$ 

<210> 1962 <211> 249

<211> 249 <212> PRT

<213> Homo sapiens

<400> 1962

Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln 1 5 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Asn Gly Ser Ile Asn Ser Gly 20 25 30

Asp Tyr Tyr Trp Ser Trp Val Arg Gln Pro Pro Gly Lys Gly Leu Glu 35 . 40 45

Trp Ile Gly Tyr Ile Ser Asn Thr Gly Ser Thr Tyr Tyr Asn Pro Ser 50 60 .

Leu Arg Ser Arg Leu Ser Met Ser Leu Asp Thr Ser Lys Asp Gln Phe Ser Leu Glu Val Thr Ser Leu Ser Ala Ala Asp Thr Ala Val Tvr Tvr 85 9.0 Cys Ala Ser Arg Pro Ala Leu Arg Ser Leu Trp Tyr Phe Asp Leu Trp 105 Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Ser Gly 120 Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln Lys Val Thr Ile Phe Cys 155 Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn Asn Ile His Trp Tyr Gln 165 Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Asp Ser Asn Lys 180 185 Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr 200 195 205 Ser Gly Thr Leu Asp Ile Thr Gly Leu Gln Thr Gly Asp Glu Ala Asp 210 215 Tyr Ser Cys Ala Thr Trp Asp Asn Ser Leu Asn Ala Tyr Val Phe Gly 225 230 235 240 Ser Gly Thr Lys Val Thr Val Leu Gly 245 <210> 1963 <211> 248 <212> PRT <213> Homo sapiens Gln Val Thr Leu Lys Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly 1 5

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Ala 20 25 Trp Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 Gly Arg Ile Lys Thr Lys Thr Asp Gly Gly Thr Thr Asp Tyr Ala Ala 55 60 Pro Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr 75 Val Tyr Leu Gln Met Asn Ser Leu Gln Ser Glu Asp Thr Gly Val Tyr Tyr Cys Thr Thr Leu His Cys Thr Gly Gly Ser Cys Gly Phe Trp Gly 100 105 110 Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 120 125 Gly Gly Ser Gly Gly Gly Ser Ala Gln Ser Val Leu Thr Gln Pro 135 140 130 Pro Ser Ala Ser Ala Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser 150 155 160 Gly Ser Ser Ser Asn Ile Gly Ile Asn Thr Val Asn Trp Tyr Gln Gln 170 Leu Pro Gly Thr Ala Pro Lys Leu Leu Met Tyr Ser Asp Ser Gln Arg 185 190 Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser 200 Ala Ser Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr 215 220 . Phe Cys Ala Ala Trp Asp Asp Ser Leu Asn Gly Val Ile Phe Gly Gly 240

Gly Thr Lys Leu Thr Val Leu Gly

<210> 1964 <211> 253 <212> PRT <213> Homo sapiens <400> 1964 Gln Val Gln Leu Gln Glm Ser Gly Ala Glu Val Lys Glu Pro Gly Ala 10 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 20 25 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 3.5 . 40 Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu 55 60 Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 7.0 75 Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 Ala Arg Asn Pro Tyr Tyr Tyr Asp Ser Ser Glu Gly Phe Phe Asp Tyr 100 105 Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Ser 120 Gly Gly Gly Gly Gly Gly Gly Ser Ala Leu Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Leu Gly Gln Pro Ala Ser 145 150 Ile Ser Cys Arg Ser Ser Gln Ser Leu Val Tyr Ser Asp Gly Asn Thr 165 170 Tyr Leu Asn Trp Phe Gln Gln Arg Pro Gly Gln Ser Pro Arg Arg Leu

Ile Tyr Lys Val Ser Asn Arg Asp Ser Gly Val Pro Asp Arg Phe Ser 195 \$200\$

185

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu 210 215 220

Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala Thr Arg Trp Pro 225 230 235 240

Phe Thr Phe Gly Gln Gly Thr Lys Met Glu Ile Lys Arg 245 250

<210> 1965

<211> 248

<212> PRT

<213> Homo sapiens

<400> 1965

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Cys Gly Phe Thr Phe Ser Ser Tyr 20 25 30

Glu Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Ser Gly Arg Gln Ala Tyr Tyr Tyr Tyr Gly Met Asp Val Trp  $100 \,$   $105 \,$   $110 \,$ 

Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly 115 120 125

Gly Gly Gly Ser Gly Gly Gly Ser Ala Leu Ser Tyr Val Leu Thr 130 135 140

Gln Pro Pro Ser Leu Ser Glu Ser Pro Gly Gln Thr Ala Lys Ile Thr 145 \$150\$

Cys Ser Gly Asp Pro Leu Ser Lys His Tyr Ala Tyr Trp Tyr Gln Gln

165 170 175

Lys Ser Gly Leu Ala Pro Val Leu Val Met Ser Lys Asp Asn Glu Arg 180 185 190

Pro Ser Gly Ile Pro Asp Arg Phe Tyr Gly Ser Ser Ser Gly Thr Thr

Ala Thr Leu Thr Ile Ser Gly Val Gln Val Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys His Ser Val Gly Ser Asp Gly Ser Ser Leu Val Phe Gly Gly 225 230 230

Gly Thr Gln Leu Thr Val Leu Ser 245

<210> 1966

<211> 254 <212> PRT

<213> Homo sapiens

<400> 1966 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Glu Pro Ser Gly 1 5 10 15

Thr Leu Ser Leu Thr Cys Ala Val Ser Gly Ala Ser Ile Ser Ser Asn  $20 \\ 25 \\ 30$ 

Asn Leu Trp Ser Trp Val Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp  $_{\rm 35}$   $_{\rm 40}$   $_{\rm 45}$ 

Ile Gly Glu Ile Tyr His Ser Gly Ser Thr Ser Tyr Asn Pro Ser Leu
50 55 60

Arg Gly Arg Val Thr Ile Ser Val Asp Lys Ser Thr Asn Gln Phe Ser 65 70 75 80

Leu Lys Leu Thr Ser Val Thr Asp Ala Asp Thr Asp Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Tyr Tyr Asp Gly Ser Ser Tyr Ser Ser Gly Asp Tyr Tyr
100 105 110

Tyr Tyr Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser 115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala 140 130 135 Leu Ser Tyr Glu Leu Thr Gln Pro Pro Ser Val Ser Val Ser Pro Gly 145 - 150 155 Gin Thr Ala Thr Ile Thr Cys Ser Gly Asp Ala Leu Pro Lys Gln Asn 170 Ala Tyr Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile 180 185 Tyr Arg Asp Ser Glu Arg Arg Ser Gly Ile Pro Glu Arg Phe Ser Gly 195 200 205 Ser Ser Ser Gly Thr Thr Ala Thr Leu Thr Ile Ser Gly Val Gln Ala 210 215 220 Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Ala Asp Ser Thr Val Ser 225 230 235 240 Tyr Tyr Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly 245 250 <210> 1967 <211> 256 <212> PRT <213> Homo sapiens <400> 1967 Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 5 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Asn Phe Asp Ser Tyr 25 Tyr Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Ile Ile Asn Pro Ser Gly Ala Ser Thr Tyr Tyr Ala Gln Lys Phe 55

2341

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ala Ser Thr Val Tyr

	Met	Glu	Leu	Ser	Ser 85	Leu	Arg	Ser	Glu	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys
	Ala	Arg	Asp	Ser 100	Asp	Leu	Val	Val	Ile 105	Pro	Thr	Ala	Ile	Gln 110	Gly	Arg
	Tyr	Tyr	Phe 115	Asp	Asn	Trp	Gly	Gln 120	Gly	Thr	Met	Val	Thr 125	Val	Ser	Ser
	Gly	Gly 130	Gly	Gly	Ser	Gly	Gly 135	Gly	Gly	Ser	Gly	Gly 140	Gly	Gly	Ser	Ala
± 1	Gln 145	Ala	Val	Leu	Thr	Gln 150	Pro	Ser	Ser	Val	Ser 155	Gly	Ala	Pro	Gly	Gln 160
	Arg	Val	Thr	Ile	Ser 165	Cys	Thr	Gly	Ser	Ser 170	Ser	Asn	Ile	Gly	Asp 175	Gly
	Tyr	Asp	Val	His 180	Trp	Tyr	Gln	Gln	Leu 185	Pro	glу	Thr	Ala	Pro 190	Lys	Leu
	Leu	Ile	Tyr 195	Gly	Asn	Ser	His	Arg 200	Pro	Ser	Gly	Val	Pro 205	Asp	Arg	Phe
	Ser	Gly 210		Lys	Ser	Asp	Thr 215		Ala	Ser	Leu	Ala 220	Ile	Thr	Gly	Leu
	Gln 225	Val	Glu	Asp	Glu	Ala 230	Asp	тух	Phe	Cys	His 235	Ser	Tyr	qsA	Ser	Ser 240
	Val	Ser	Gly	Trp	Ile 245	Phe	Gly	Gly	Gly	Thr 250	Lys	Val	Thr	Val	Leu 255	Gly
	<21 <21	0> 1 1> 2 2> P: 3> H	49 RT	sapi	ens											
		0> 1 Val		Leu	Val 5	Gln	Ser	Gly	Ala	Glu 10	Val	Lys	Lys	Pro	Gly 15	Ser
	Ser	Val	Lys	Val 20	Ser	Cys	Lys	Ala	Ser 25	Gly	Gly	Thr	Phe	Thr 30	Ser	Tyr

Ala	Val	Thr	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu	Glu	Trp	Met
		3.5					40					45			

- Gly Thr Val Val Pro Gly Phe Gly Thr Arg Lys Tyr Ala Glu Lys Phe  $50 \ \ \,$
- Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Arg Ala Ala Tyr
- Met Glu Leu Ser Ser Leu Lys Ser Glu Asp Thr Ala Val Phe Tyr Cys 85 90 95
- Ala Arg Gly Lys Arg Tyr Ser Tyr Gly Trp Tyr Phe Asp Ile Trp Gly 100 105 110
- Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 120 125
- Gly Gly Ser Gly Gly Gly Ser Ala Gln Ala Val Leu Thr Gln Pro 130 135 140
- Ser Ser Val Ser Gly Ala Pro Gly Gln Arg Gly Thr Ile Ser Cys Thr 145 \$150\$
- Gly Ser Ser Ser Asn Ile Gly Ala Gly Tyr Asp Val His Trp Tyr Gln \$165\$
- Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Gly Asn Ser Asn 180  $$185\$
- Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr 195 \$200\$
- Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln Ala Glu Asp Glu Ala Asp 210 215 220
- Tyr Tyr Cys His Ser Tyr Asp Ser Ser Leu Ser Ala Tyr Val Phe Gly 225 230 235 240

Thr Gly Thr Lys Leu Thr Val Leu Gly

<210> 1969

<211> 243

<212> PRT

<213> Homo sapiens

<400> 1969

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr \$20\$

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Ser  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$ 90 95

Val Lys Asp Thr Pro Leu Asp Pro Trp Gly Arg Gly Thr Leu Val Thr 100 \$105\$

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Gly 115 120 125

Gly Ser Ala Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Gly Ala 130 135 140

Pro Gly Gln Arg Val Thr Ile Ser Cys Thr Gly Gly Ser Ser Asn Ile 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  160

Gly Ala Asp Tyr Asp Val His Trp Tyr Gln Gln Leu Pro Gly Ala Ala 165 170 175

Pro Lys Leu Leu Ile Tyr Ala Asn Val Asn Arg Pro Ser Gly Val Pro 180 195 190

Asp Arg Phe Ser Ala Ser Lys Ser Gly Thr Ser Ala Ser Leu Val Ile 195  $\phantom{\bigg|}200\phantom{\bigg|}205\phantom{\bigg|}$ 

Thr Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr 210 \$215\$

Asp Ser Gly Leu Ser Ala Ser Val Phe Gly Gly Gly Thr Lys Leu Thr 225 230 235 240

Val Leu Glv

<210> 1970

<211> 249 <212> PRT

<213> Homo sapiens

<400> 1970

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 10 15

Ser Val Lys Val Ser Cys Thr Ala Ser Gly Tyr Asn Phe Thr Asn Asn 20 25 30

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Ile Ile Ser Pro Asn Thr Ser Asn Thr Lys Tyr Ala Pro Lys Phe
50 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ala Thr Val Tyr 65 70, 75 80

Met Glu Leu Ser Thr Leu Arg Ser Glu Asp Thr Ala Ile Tyr Tyr Cys  $85_{\scriptscriptstyle \parallel}$  90 95

Ala Arg Glu Gly Asp Pro Thr Asp Asn Asp Ala Phe Asp Val Trp Gly

Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ala Val Leu Thr Gln Pro 130 135

Ser Ser Val Ser Gly Ala Pro Gly Gln Arg Val Thr Ile Ser Cys Thr 145 \$150\$

Gly Ser Ser Ser Asn Ile Gly Asp Gly Tyr Asp Val His Trp Tyr Gln \$165\$

Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Gly Asn Thr Asn

180 185 190

Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Asp Thr

Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln Val Glu Asp Glu Ala Asp 210 215 220

Tyr Phe Cys His Ser Tyr Asp Ser Ser Met Ser Gly Trp Ile Phe Gly 225 230 235

Gly Gly Thr Lys Val Thr Val Leu Gly

<210> 1971

<211> 249 <212> PRT

<213> Homo sapiens

<400> 1971

Glu Val Gln Leu Met Gln Ser Gly Ala Glu Leu Lys Lys Pro Gly Ala 1  $\phantom{-}$  10  $\phantom{-}$  15

Ser Val Lys Leu Ser Cys Lys Pro Ser Gly Tyr Thr Val Thr Pro Phe \$20\$

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ 40 \ \ 45$ 

Gly Ile His Ser Ser Ser Gly Asn Thr Ala Tyr Ala His Asn Phe  $_{\rm 50}$   $_{\rm 60}$ 

Gln Gly Arg Ile Ala Met Ile Ser Asp Thr Ser Thr Gly Ser Val Tyr  $_{65}$   $\phantom{0}$  70  $\phantom{0}$  75  $\phantom{0}$  80

Met Glu Leu Ser Gly Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Thr Asp Gly Pro Thr Tyr Ala Arg Pro Tyr Tyr Leu Asp His Trp

Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln Ser Val Leu Thr Gln  $130 \,$   $135 \,$   $140 \,$ 

Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys 145 \$150\$

Ser Gly Asp Arg Ser Asn Ile Gly Ser Asn Tyr Val Leu Trp Tyr Arg 165 170 175

Gln Leu Pro Gly Pro Ala Pro Lys Val Leu Ile Tyr Asn Asn Ser Gln  $180 \,$   $180 \,$   $190 \,$ 

Arg Pro Ser Gly Val Pro Ala Arg Phe Ser Ala Ser Arg Ser Gly Thr 195  $\phantom{\bigg|}200\phantom{\bigg|}$ 

Ser Ala Ser Leu Ala Ile Ser Gly Leu Arg Ser Glu Asp Glu Ala Asp 210 215 220

Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu Arg Gly Trp Val Phe Gly 225 230 235 240

Gly Gly Thr Lys Val Thr Val Leu Gly 245

<210> 1972

<211> 245

<212> PRT

<213> Homo sapiens

<400> 1972

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Pro Gly Asn Thr Phe Ser Ser Tyr 20 25 30

Gly Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val 35 40 45

Gly Gly Ile Phe Pro Ile Phe Asp Ala Val Asn Tyr Ala Glu Lys Phe 50 60 .

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Thr Thr Ala Tyr 65 70 75 80

Met Glu Leu Asn Arg Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys

Ala Arg Asp Gly Thr Lys Tyr Asp Trp Gly Phe Asp Tyr Trp Gly Arg 100 105 110

Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Ser Ala Leu Glu Ile Val Leu Thr Gln Ser 130 135 140

Pro Ser Ser Val Ser Aļa Ser Val Gly Asp Arg Val Ser Ile Thr Cys 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}$ 

Arg Ala Ser Gln Gly Ile Gly Ser Trp Leu Phe Trp Tyr Gln Gln Lys \$165\$ . \$170\$ . \$175\$

Pro Gly Lys Ala Pro Lys Leu Leu Ile Ser Ala Val Ser Gly Leu Gln 180 185 190

Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe 195 200 205

Ala Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr 210 \$215\$

Cys Gln Gln Ala His Ser Phe Pro Ile Thr Phe Gly Gln Gly Thr Arg 225  $\phantom{\bigg|}230\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Leu Glu Ile Lys Arg 245

<210> 1973

<211> 254

<212> PRT <213> Homo sapiens

also nomo saprene

<400> 1973

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala 1 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Gly Ile Val Trp Val Arg Gln Ala pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Trp Met Ser Pro Tyr Asn Gly Tyr Thr Asn Tyr Ala Arg Lys Phe  $_{50}$ 

Glu Gly Arg Val Thr Met Thr Arg Glu Thr Ser Thr Thr Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 95 95

Ala Arg Glu Thr Phe Ser His Cys Ser Gly Gly Ser Cys Tyr Pro Phe 100 105 110

Asp Tyr Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ala Val 130 140

Leu Thr Gln Pro Ser Ser Val Ser Gly Ala Pro Gly Gln Arg Val Thr 145 150 150 155 160

Ile Ser Cys Thr Gly Ser Ser Ser Asn Ile Gly Ala Gly Tyr Asp Val 165 170 175

His Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr  $180 \ \ 185 \ \ \ 190$ 

Gly Asn Ser Asn Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser 195 200 205

Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln Ala Glu 210  $$\rm 215$$ 

Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Asn Arg Leu Ser Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Ser Asp Val Phe Gly Thr Gly Thr Lys Val Thr Val Leu Gly \$245\$

<210> 1974

<211> 248

<212> PRT

<213> Homo sapiens

<400> 1974

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly

10 15 Ser Leu Arg Leu Ser Cvs Ala Ala Ser Glv Phe Thr Phe Ser Ser Tvr Glu Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 40 Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 9.0 Ala Arg Ser Gly Arg Gln Ala Tyr Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Ser Gly 120 Gly Gly Gly Ser Gly Gly Gly Ser Ala Leu Ser Tyr Val Leu Thr 135 Gln Pro Pro Ser Leu Ser Glu Ser Pro Gly Gln Thr Ala Lys Ile Thr Cys Ser Gly Asp Pro Leu Ser Lys His Tyr Ala Tyr Trp Tyr Gln Gln Lys Ser Gly Leu Ala Pro Val Leu Val Met Ser Lys Asp Asn Glu Arg Pro Ser Gly Ile Pro Asp Arg Phe Tyr Gly Ser Ser Ser Gly Thr Thr 195 Ala Thr Leu Thr Ile Ser Gly Val Gln Val Glu Asp Glu Ala Asp Tyr 210 215 - 220

Tyr Cys His Ser Val Gly Ser Asp Gly Ser Ser Leu Val Phe Gly Gly 225 230 235

Gly Thr Gln Leu Thr Val Leu Ser 245

<210> 1975

<211> 246 <212> PRT

<213> Homo sapiens

<400> 1975

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr \$20\$

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$ 90 95

Ala Lys Glu Phe Phe Gly Tyr Val Tyr Leu Thr Asp Tyr Trp Gly Arg 100 \$105\$

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Ser Ala Leu Ser Ser Glu Leu Thr Gln Asp 130 135 140

Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln 145 150 155 160

Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro 165 170 175

Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser 180 185 190

Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser

195 200 205

Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys 210 225 220

Asn Ser Arg Asp Ser Ser Gly Asn His Leu Val Phe Gly Thr Gly Thr 225 230 . 235 240

Lys Leu Thr Val Leu Gly 245

<210> 1976 <211> 248

<212> PRT

<213> Homo sapiens

<400> 1976

Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu Val Lys Pro Gly Gly 1  $\phantom{-}$  5  $\phantom{-}$  10  $\phantom{-}$  15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Ala 20 25 30

Trp Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val \$35\$ 40 45

Gly Arg Ile Lys Thr Lys Thr Asp Gly Gly Thr Thr Asp Tyr Ala Ala 50 \$55\$

Pro Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr 65 70 75 80

Val Tyr Leu Gln Met Asn Ser Leu Gln Ser Glu Asp Thr Gly Val Tyr 85 90 95

Tyr Cys Thr Thr Leu His Cys Thr Gly Gly Ser Cys Gly Phe Trp Gly 100 105 110

Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Ser Ala Gln Ala Val Leu Thr Gln Pro  $130 \,$   $135 \,$   $140 \,$ 

Ser Ser Ala Ser Ala Thr Pro Gly Gln Gly Val Thr Ile Ser Cys Ser 145 150 155 160

Gly Ser Ser Ser Asn Ile Gly Ser Asn Thr Val Asn Trp Tyr Gln Gln
165 170 175

Val Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Gly Asn Asn Gln Arg 180 185 190

Pro Ser Gly Val Pro Glu Arg Leu Ser Gly Ser Lys Ser Gly Thr Ser 195  $200\,$  205

Ala Ser Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Ala Ala Trp Asp Asp Ser Leu Asn Gly Val Val Phe Gly Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Gly Thr Lys Leu Thr Val Leu Gly

<210> 1977

<211> 250

<212> PRT

<213> Homo sapiens

<400> 1977

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Gln Ala Ser Gly Gly Thr Phe Ser Asn Tyr

Ala Phe Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $^{35}$  40  $^{45}$ 

Glu Gly Arg Leu Thr Ile Thr Ala Asp Glu Ser Thr Arg Thr Thr Tyr 65 70 75 . 80

Met Asp Leu Arg Ser Leu Arg Arg Glu Asp Thr Ala Leu Tyr Phe Cys 85 90 95

Ala Arg Val Asp Tyr Thr Asp Tyr Glu Met Gly Ala Phe Glu Ile Trp  $100 \hspace{1cm} 105 \hspace{1cm} 115$ 

Gly	Arg	Gly 115	Thr	Leu	Val	Thr	Val 120	Ser	Ser	Gly	Gly	Gly 125	Gly	Ser	Gly
Gly	Gly 130	Gly	Ser	Gly	Gly	Gly 135		Ser	Ala	Gln	Ser 140	Val	Leu	Thr	Gln
Pro 145	Pro	Ser	Val	Ser	Gly 150	Ala	Pro	Gly	Gln	Arg 155	Val	Thr	Ile	Ser	Cys 160
Thr	Gly	Ser	Ser	Ser 165	Asn	Ile	Gly	Ala	Gly 170		Asp	Val	His	Trp 175	Tyr
Gln	Gln	Leu	Pro 180	Gly	Lys	Gly	Pro	Lys 185	Val	Leu	Met	Tyr	Asp 190	Asn	Asn
Asn	Arg	Pro 195	Ser	Gly	Val	Pro	Asp 200	Arg	Phe	Ser	Gly	Ser 205	Lys	Ser	Gly
Ala	Ser 210	Ala	Ser	Leu	Ala	Ile 215	Thr	Gly	Leu	Gln	Ala 220	Glu	Asp	Glu	Ala
Asp 225	Tyr	Tyr	Сув	Gln	Ser 230	Tyr	Asp	Ser	Ser	Leu 235	Asp	Gly	Tyr	Val	Phe 240
Gly	Thr	Gly	Thr	Lys 245		Thr	Val	Leu	Gly 250						
<21 <21	0> 1: 1> 2: 2> P! 3> He	47 RT	sapi	ens											
	0> 1: Val			Val	Glu	Thr	Gly	Gly	Gly 10	Leu	Val	Gln	Pro	Gly 15	Gly
Ser	Leu	Arg	Leu 20	Ser	Cys	Ala	Ala	Ser 25	Gly	Leu	Thr	Phe	Ser 30	Ser	Tyr
Ala	Met	Thr 35	Trp	Val	Arg	Gln	Ala 40	Pro	Gly	Lys	Gly	Leu 45	Glu	Trp	Val
Ser	Ala 50		Ser	Gly	Asn	Gly 55	Ser	Asn	Thr	Tyr	His	Ala	Asp	Phe	Val

Lys Gly Arg Phe Thr Ala Ser Arg Asp Asn Ser Lys Ser Ile Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Thr Ala Asp Asp Ser Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Val Gly Asn Phe Gly Tyr Tyr Phe Glu Tyr Trp Gly Gln Gly 100 105 110

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Ser Ala Gln Ser Val Leu Thr Gln Pro Pro Ser 130  $$135\$ 

Val Ser Gly Ala Pro Gly Gln Arg Val Thr Ile Ser Cys Thr Gly Ser 145 150 155 160

Ser Ser Asn Ile Gly Ala Gly Tyr Asp Val His Trp Tyr Gln Gln Leu 165 170 175

Pro Arg Thr Ala Pro Lys Leu Leu Ile Phe Gly Asn Asn Asn Pro 180 185 190

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Arg Ser Val Thr Ser Ala 195 200 205

Ser Leu Val Ile Thr Gly Leu Gln Pro Asp Asp Glu Ala Asp Tyr Tyr 210 215 220

Cys Gln Ser Tyr Asp Ser Ser Leu Ser Gly Trp Val Phe Gly Gly Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}\phantom{\bigg|}\phantom{\bigg|}235\phantom{\bigg|}\phantom{\bigg|}\phantom{\bigg|}$ 

Thr Lys Leu Thr Val Leu Gly 245

<210> 1979

<211> 245

<212> PRT

<213> Homo sapiens

<400> 1979

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Glu 1 15

Ser Leu Glu Leu Ser Cys Ala Thr Ser Gly Phe Ser Phe Ser Gly Ala

20 25 30

Ala Ile His Trp Val Arg Gln Ala Ser Gly Lys Gly Leu Glu Trp Val 35 40  $\cdot$  45

Gly Arg Ile Arg Asn Lys Gly Asn Asn Tyr Ala Thr Ala Tyr Ala Ala 50  $\,$  55  $\,$  60  $\,$ 

Ser Val Glu Gly Arg Phe Thr Ile Ser Arg Asp Glu Ser Lys Asn Thr 65 70 75 80

Ala Tyr Leu His Leu Asn Ser Leu Lys Thr Glu Asp Thr Ala Arg Tyr \$85\$ 90 95

Phe Cys Thr Lys Ser Ser Arg Asn Gly Gly Asp Tyr Trp Gly Arg Gly 100 \$105\$

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly 115 \$120\$

Ser Gly Gly Gly Ser Ala Leu Ser Ser Glu Leu Thr Gln Asp Pro 130 135 140

Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  160

Asp Ser Leu Arg Gly Asn Tyr Ala Thr Trp Tyr Gln Gln Lys Pro Gly 165 170 175

Gln Ala Pro Val Leu Val Phe Tyr Gly Lys Asn Asn Arg Pro Ser Trp 180 185 190

Ile Pro Asp Arg Phe Ser Gly Ser Arg Ser Gly Asn Thr Ala Ser Leu 195  $\phantom{\bigg|}200\phantom{\bigg|}$  205

Ser Arg Asp Thr Ser Gly Asn His Arg Val Phe Gly Gly Gly Thr Lys 225 230 235 240

Leu Thr Val Leu Gly

<210> 1980

<211> 246 <212> PRT

<213> Homo sapiens

<400> 1980

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr \$20\$

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val \$35\$ \$40\$

Ser Ala Ile Arg Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val $_{50}$ 

Lys Gly Arg Phe Thr Íle Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Lys Asp Leu Ser Arg Val Ala Gly Arg Phe Asp Tyr Trp Gly Lys  $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly 115  $_{\odot}$  120  $_{\odot}$  125

Gly Ser Gly Gly Gly Gly Ser Ala Leu Ser Ser Glu Leu Thr Gln Asp 130 135 140

Pro Thr Val Ser Val Ala Leu Gly Gln Thr Val Lys Ile Thr Cys Gln 145 150 155 160

Gly Asp Ser Leu Arg Asn Tyr Tyr Ser Ser Trp Tyr Gln Gln Lys Pro

Gly Gln Ala Pro Thr Leu Leu Ile Phe Gly Lys Asn Lys Arg Pro Ser , 180 185 190

Gly Ile Pro Gly Arg Phe Ser Gly Ser Asn Ser Gly Asn Thr Ser Ser 195 200 205

Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys

210 215 220

Asn Ser Arg Asp Ser Ser Gly Thr His Leu Val Phe Gly Gly Gly Thr 225 230 235 240

Lys Val Thr Val Leu Gly 245

<210> 1981 <211> 247 <212> PRT <213> Homo sapiens

<400> 1981
Gln Leu Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Leu Glu
1 5 10
15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Val Ser Gly Arg \$20\$

Thr His Tyr Trp Gly Trp Ile Arg Leu Pro Pro Gly Lys Gly Met Glu

Trp Ile Ala Ser Leu Ser Phe Asp Gly Thr Pro Phe Tyr Asn Pro Ser 50

Leu Lys Ser Arg Val Ser Val Ser Arg Asp Thr Ser Lys Asn Gln Phe 65 70 75 80

Ser Leu Lys Val Thr Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr 85 90 95

Cys Ala Arg His Asp Val Tyr Gly Asp Leu Phe Asp Tyr Trp Gly Gln  $100 \,$   $105 \,$   $110 \,$ 

Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser Val Leu Thr Gln Pro Pro 130 140

Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Pro Ile Ser Cys Ser Gly 145 150 155 160

Ser Gly Ser Asn Ile Gly Ser Asn Ser Val Ser Trp Tyr Gln Gln Val 165 170 175

Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Asn Asn Asn Glu Arg Pro 180 185 190

Ser Gly Val Pro Asp Arg Phe Ser Ala Ser Lys Ser Gly Thr Ser Ala 195 200 205

Ser Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr 210 215 220

Cys Ala Ser Trp Asp Asp Ser Leu Thr Val Pro Val Phe Gly Gly Gly 225 \$230\$ 235 \$240\$

Thr Lys Leu Thr Val Leu Gly 245

<210> 1982

<211> 248

<212> PRT

<213> Homo sapiens

<400> 1982

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Thr Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Lys Ala

Trp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  $^{40}$  45 .

Gly Arg Ile Lys Thr Lys Thr Asp Gly Gly Ala Pro Asp Tyr Ala Ala 50 60

Pro Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr 65 70 75 80

Val Tyr Leu Gin Met Asn Ser Leu Lys Thr Glu Asp Ala Ala Val Tyr 85 90 . 95

Tyr Cys Ser Thr Leu His Cys Ser Gly Gly Ser Cys Gly Phe Trp Gly 100 \$105\$

Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 120 125

Gly	Gly 130	Ser	Gly	Gly	Gly	Gly 135	Ser	Ala	Gln	Ser	Val 140	Leu	Thr	Gln	Pro
Pro 145	Ser	Ala	Ser	Gly	Thr 150	Pro	Gly	Gln	Arg	Val 155	Ser	Ile	Ser	Cys	Ser 160
Gly	Ser	Thr	Ser	Asn 165	Ile	Gly	Thr	Asn	Thr 170	Val	Asn	Trp	Tyr	Arg 175	Gln
Leu	Pro	Gly	Thr 180	Ala	Pro	Lys	Leu	Leu 185	Ile	Tyr	Ser	Asn	Asn 190	Gln	Arg
Pro	Ser	Gly 195	Val		Asp	Arg	Phe 200	Ser	Gly	Ser	Lys	Ser 205	Gly	Thr	Ser
Val	Ser 210	Leu	Asp	Ile	Ser	Gly 215	Leu	Gln	Ser	Glu	Asp 220	Glu	Ala	Asp	Tyr
Phe 225	Cys	Ala	Ala	Trp	Asp 230	Gly	Ser	Arg		Gl <i>y</i> 235	Val	Val	Phe	Gly	Gly 240
Gly	Thr	Lys	Leu	Thr 245	Val	Leu	Gly								
<213	<210> 1983 <211> 254 <212> PRT <213> Homo sapiens														
	0> 1:														
			Leu	Val 5	Gln	Ser	Gly	Ala	Glu 10	Val	Lys	Lys	Pro	Gly 15	Ala
Ser	Val	Lys	Val 20	Ser	Cys	Lys	Ala	Ser 25	Gly	Tyr	Thr	Phe	Thr 30	Ser	Tyr
Tyr	Met	His 35	Trp	Val	Arg	Gln	Ala 40	Pro	Gly	Gln	Gly	Leu 45		Trp	Met
Gly	Ile 50	Ile	Asn	Pro	Ser	Gly 55	Gly	Ser	Thr	Ser	Tyr 60	Ala	Gln	Lys	Phe
Gln 65	Gly	Arg	Val	Thr	Met 70	Thr	Arg	Asp	Thr	Ser 75	Thr	Ser	Thr	Val	Tyr 80

Met	Glu	Leu	Ser	Ser 85	Leu	Arg	Ser	Glu	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Сув	
Ala	Arg	Glu	Gly 100	Ser	Ile	Val	Gly	Ala 105	Thr	Leu	Thr	Ile	Asn 110	Asp	Ala	
Phe	Asp	Ile 115	Trp	Gly		Gly	Thr 120	Leu	Val	Thr	Val	Ser 125	Ser	Gly	Gly	
Gly	Gly 130	Ser	Gly	Gly	Gly	Gly 135	Ser	Gly	Gly	Gly	Gly 140	Ser	Ala	Gln	Ser	
Val 145	Val	Thr	Gln	Pro	Pro 150	Ser	Val	Ser	Gly	Ala 155	Pro	Gly	Gln	Arg	Val 160	
Thr	Ile	Ser	Cys	Thr 165	Gly	Ser	Ser	Ser	Asn 170	Ile	Gly	Asp	Gly	Tyr 175	Asp	
Val	His	Trp	Tyr 180	Gln	Gln	Leu	Pro	Gly 185	Thr	Ala	Pro	Lys	Leu 190	Leu	Ile	
Tyr	Gly	Asn 195	Thr	Asn	Arg	Pro	Ser 200	Gly	Val	Pro	Asp	Arg 205	Phe	Ser	Gly	
Ser	Lys 210	Ser	Asp	Thr	Ser	Ala 215	Ser	Leu	Ala	Ile	Thr 220		Leu	Gln	Val	
Glu 225	Asp	Glu	Ala	Asp	Tyr 230	Phe	Cys	His	Ser	Tyr 235	Asp	ser	ser	Leu	Ser 240	
Gly	Trp	Ile	Phe	Gly 245	Gly	Gly	Thr	Lys	Val 250	Thr	Val	Leu	Gly			
<213 <213	0> 19 L> 24 2> PI B> Ho	19 RT	sapi	ens												4
	0> 19 Val		Leu	Val 5	Gln	Ser	Gly	Ala	Glu 10	Val	Lys	Lys	Pro	Gly -15	Ser	
Ser	Val	Lys	Ile 20	Ser	Cys	Lys	Ala	Ser 25	Gly	Gly	Thr	Phe	ser 30	Ser	Tyr	

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

40 . 45 3.5

Gly Thr Val Ile Pro Asn Ser Asn Ile Arg Lys Tyr Ala Gln Lys Phe 55

Gln Gly Arg Val Thr Ile Thr Ala Asp Asp Ser Thr Arg Thr Ala Tyr

Met Glu Leu Ser Ser Leu Arg Ser Gly Asp Thr Ala Ile Phe Tyr Cys 85 90

Ala Arg Gly Lys Arg Tyr Ser Tyr Gly Trp Tyr Phe Asp Ile Trp Gly 105 110 100

Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 120

Gly Gly Ser Gly Gly Gly Ser Ala Gln Ala Val Leu Thr Gln Pro 130 135

Ser Ser Val Ser Gly Ala Pro Gly Gln Arg Val Thr Ile Ser Cys Thr 150 1.55 145

Gly Ser Asn Ser Asp Ile Gly Ala Gly Tyr Asp Val His Trp Tyr Gln 1.65 170

Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Gly Asn Asn Asn 185 180

Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr 200 . 205

Ser Ala Ser Leu Ala Ile Thr Glu Leu Glm Ala Glu Asp Glu Ala Asp 220

Tyr Tyr Cys Gln Ser Tyr Asp Ser Ser Leu Ser Gly Tyr Val Phe Gly 225 230

Ser Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1985

<211> 242 <212> PRT

<213> Homo sapiens

<400> 1985 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Asp Tyr 20 Phe Ile His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 Gly Trp Ile Asn Pro Lys Asn Gly Gly Thr Tyr Phe Ala Gln Asp Phe Gln Gly Arg Val Thr Met Thr Gly Asp Thr Ser Ile Ala Thr Ala Phe Met Glu Leu Ser Gly Leu Lys Ser Asp Asp Thr Ala Ile Tyr Tyr Cys Ala Thr Asp Pro Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val 100 105 Ser Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly 120 115 125 Ser Ala Leu Ser Tyr Glu Leu Thr Gln Pro Pro Ser Val Ser Gly Thr 130 135 Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Asn Ser Asn Ile 145 150 155 160 Gly Ile Asn Ala Val Asn Trp Tyr Lys Gln Leu Pro Gly Thr Ala Pro 165 170 175 Lys Leu Leu Ile Tyr Asn Asn Asn Gln Arg Pro Ser Trp Val Arg Asp 180 185 190 Arg Phe Ser Gly Ser Lys Asp Gly Thr Ser Val Ser Leu Ala Ile Ser 200 195 205 Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ser Trp Asp 210 215 220

Asp Ser Leu Asn Ala Tyr Val Phe Gly Gly Gly Thr Lys Val Thr Val

225 230 235 240

Leu Gly

<210> 1986 <211> 249 <212> PRT

<213> Homo sapiens

<400> 1986

Glu Val Gln Leu Met Gln Ser Gly Ala Glu Leu Lys Lys Pro Gly Ala 1  $\phantom{-}$  15

Ser Val Lys Leu Ser Cys Lys Pro Ser Gly Tyr Thr Val Thr Pro Phe \$20\$

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Ile Ile His Ser Ser Ser Gly Asn Thr Ala Tyr Ala His Asn Phe  $_{\rm 50}$   $_{\rm 60}$ 

Gin Gly Arg Ile Ala Met Ile Ser Asp Thr Ser Thr Gly Ser Val Tyr  $65 \hspace{1cm} 70 \hspace{1cm} 75 \hspace{1cm} 80 \hspace{1cm}$ 

Met Glu Leu Ser Gly Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys \$85\$ . \$90

Ala Thr Asp Gly Pro Thr Tyr Ala Arg Pro Tyr Tyr Leu Asp His Trp \$100\$

Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly 115  $$120\$ 

Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln Ser Val Leu Thr Gln 130 135 140

Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys 145 \$150\$

Ser Gly Asp Arg Ser Asn Ile Gly Ser Asn Tyr Val His Trp Tyr Arg 165 170 175

Gln Leu Pro Gly Thr Ala Pro Lys Val Leu Ile Tyr Asn Asn Ser Gln 185 190

Arg Pro Ser Gly Val Pro Ala Arg Phe Ser Ala Ser Arg Ser Gly Thr

Ser Ala Ser Leu Ala Ile Ser Gly Leu Arg Ser Glu Asp Glu Ala Asp 210 215 220

Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu Arg Gly Trp Val Phe Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Gly Gly Thr Lys Val Thr Val Leu Gly

<210> 1987

<211> 253 <212> PRT

<213> Homo sapiens

<400> 1987

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Arg Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Tyr His 20 25 30

Tyr Leu His Trp Val Arg Gln Val Pro Gly Arg Gly Leu Glu Trp Met 35 40 45

Gly Ile Ile Asn Pro Arg Asn Tyr Ile Thr Thr Asn Ala Gln Thr Phe 50 55 60

Gln Gly Arg Leu Ser Met Thr Thr Asp Thr Ser Thr Ser Thr Val Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Thr Ser Asp Asp Thr Gly Val Tyr Tyr Cys 85 90 95

Ala Arg Glu Ser Ser Gly Thr Leu Gly Glu Phe Ser Leu Glu Leu Pro  $^{\circ}$  100  $^{\circ}$  110

Phe Asp Tyr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser 130 135 140

Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Ala Pro Gly Gln Arg Val 150 155 Thr Phe Ser Cys Ser Gly Gly Ser Ser Asn Ile Gly Ser Ser Tyr Val 165 170 Tyr Trp Tyr Arg Gln Leu Pro Gly Ser Ala Pro Lys Leu Val Ile Tyr 185 Arg Asn Asp Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Phe 200 Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Arg Ser Glu 215 Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Arg Leu Arg Gly 235 230 Leu Ala Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 <210> 1988 <211> 248 <212> PRT <213> Homo sapiens Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser Ser Val Lys Gly Ser Cys Lys Ser Ser Gly Gly Thr Phe Ser Ser Tyr 20 Ala Leu Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 Gly Gly Ile Ile Pro Ile Phe Gly Thr Thr Asn Tyr Ala Gln Lys Phe 50 Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr 65 70 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys

2366 -

85

90

Thr Thr Leu Gly Arg Asn Tyr Thr Ser Ser Trp Ser Leu Asp Tyr Trp

- Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
  115 120 125
- Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Ser Ser Glu Leu Thr 130 135
- Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  160
- Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Gln 165 170 175
- Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Asn Ser Gly Asn Thr
- Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 \$215\$
- Tyr Cys Asn Ser Arg Asp Thr Ser Gly Asn His Leu Val Phe Gly Thr 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$  240
- Gly Thr Lys Leu Thr Val Leu Gly
- <210> 1989
- <211> 240
- <212> PRT
- <213> Homo sapiens
- <400> 1989
- Gln Val Gln Leu Gln Gln Ser Gly Ala Gly Val Arg Arg Pro Gly Thr
- Ser Val Lys Ile Ser Cys Lys Thr Ser Gly Tyr Ile Phe Ser Gln Tyr 20 25 30
- Pro Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
- Ala Trp Ile Asp Thr Gly Asn Gly Ser Thr Arg Tyr Ser Pro Asn Phe

50 55 60

Gln Asp Arg Val Thr Val Thr Arg Asp Thr Ser Ala Asn Thr Ala Tyr 65 70 75 80

Leu Glu Leu Arg Ser Leu Arg Phe Thr Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Thr Asn Ala Phe Asp Tyr Trp Gly Lys Gly Thr Leu Val Thr Val

Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly 115 120 125

Ser Ala Leu Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala 130 135 140

Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Asn 145 150 155

Tyr Tyr Ala Gly Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Ala Leu 165 170 175

Val Ile Ser Gly Lys Asn Asn Arg Ala Ser Gly Ile Pro Asp Arg Phe 180 185 190

Ser Ser Ser Asp Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser 210 215 220

Gly Asn Leu Ile Ile Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly 225 230 235 240

<210> 1990

<211> 250 <212> PRT

<213> Homo sapiens

-

Thr Leu Ser Leu Thr Cys Ala Val Ser Gly Gly Ser Ile Ser Ser Pro

Asn	Trp	Arg 35	ser	Trp	Val	Arg	Gln 40	Pro	Pro	Gly	Lys	Val 45	Leu	Glu	Tr
Ile	Gly 50	Glu	Ile	Tyr	His	Ser 55	Gly	Ser	Ile	Asn	Tyr 60	Asn	Pro	Ser	Lev
Lys 65	Ser	Arg	Gly	Thr	Met 70	Ser	Val	Asp	Lys	Ser 75	Lys	Asn	Gln	Phe	Ser B(
Leu	Ile	Leu	Asn	Ser 85	Val	Thr	Ala	Ala	Asp 90	Thr	Thr	Val	Tyr	Tyr 95	Сув
Ala	Arg	Gly	Arg 100	Gly	Tyr	Ser	Ser	Ser 105	Ser	Ser	Val	Tyr	Gly 110	Met	Asp
Ile	Trp	Gly 115	Gln	Gly	Thr	Met	Val 120	Thr	Val	Ser	Ser	Gly 125	Gly	Gly	Gly
Ser	Gly 130	Gly	Gly	Gly	Ser	Gly 135	Gly	Gly	Gly	Ser	Ala 140	Leu	Ser	Ser	Glu
Leu 145	Thr	Gln	Asp	Pro	Ala 150	Val	Ser	Val	Ala	Leu 155	Gly	Gln	Thr	Val	Arg 160
Ile	Thr	Cys	Gln	Gly 165	Asp	Ser	Leu	Arg	Thr 170	Tyr	Tyr	Ala	Asn	Trp 175	Туг
Gln	Gln	Lys	Pro 180	Gly	Gln	Ala	Pro	Val 185	Val	Val	Ile	Tyr	Gly 190	Lys	Ile
Asn	Arg	Pro 195	Ser	Gly	Ile	Pro	Asp 200	Arg	Phe	Ser	Gly	Ser 205	Ser	Ser	Gly
Tyr	Thr 210	Ala	Ser	Leu	Thr	Ile 215	Thr	Gly	Ala	Gln	Ala 220	Glu	qaA	Glu	Ala
Asp 225	Tyr	Tyr	Cys	Asn	Ser 230	Gly	Asp	Arg	Ser	Gly 235	Asn	His	Tyr	Val	Phe 240
Gly	Thr	Gly	Thr	Lys 245	Val	Thr	Val	Leu	Gly 250						

<210> 1991

<211> 244 <212> PRT <213> Homo sapiens

<400> 1991

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Lys Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr

Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  $_{35}$   $_{40}$   $_{45}$ 

Ser Ser Ile Ser Ser Ser Ser Ser His Ile Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr  $_{65}$   $\phantom{0}$  70  $\phantom{0}$  75  $\phantom{0}$  80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$ 90 95

Ala Arg Val His Ser Ser Gly Ser Trp Gly Gln Gly Thr Leu Val Thr 100 105 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Gly 115 120 125

Gly Ser Ala Leu Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu Pro 130 135 140

Val Thr Leu Gly Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  160

Leu Val His Ser Asp Gly Asn Thr Tyr Leu Asn Trp Phe Gln Gln Arg 165 \$170\$

Pro Gly Gln Ser Pro Arg Arg Leu Ile Tyr Lys Val Ser Asn Arg Asp 180 185 190

Phe Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Tyr Phe 195 200 205

Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr 210 215 220

Cvs Met Gln Gly Thr His Arg Ile Thr Phe Gly Gln Gly Thr Arg Leu 230 235 240 225 Glu Ile Lys Arg <210> 1992 <211> 252 <212> PRT <213> Homo sapiens <400> 1992 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser Ser Val Met Val Ser Cys Lys Thr Ser Gly Gly Thr Phe Asn Asn Asp 25 Gly Phe Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Gly Ile Ile Pro Tyr Phe Gly Thr Thr His Lys Ala Glu Lys Phe Gln Asp Arg Val Thr Ile Thr Ala Asp Glu Ser Ala Gly Thr Val Leu 70 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Ser Ala Ile Tyr Tyr Cys 90 85 Ala Arg Lys Arg Gly Asp Phe Gly Val Ile Arg Leu His His Tyr Tyr 100 105 Gly Met Asp Val Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly 120 115 Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu 130 135 Ser Tyr Glu Leu Thr Gln Pro Pro Ser Val Ser Val Ser Pro Gly Gln

Thr Ala Arg Ile Thr Cys Ser Gly Asp Ala Leu Pro Asn Gln Tyr Ala . , 165 170 175 .

150

145

2371

Tyr Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr 180 185 Lys Asp Ser Glu Arg Pro Ser Gly Ile Pro Glu Arg Phe Ser Gly Ser 200 Ser Ser Gly Thr Thr Val Thr Leu Thr Ile Ser Gly Val Gln Ala Glu 215 210 Asp Glu Ala Asp Tyr Tyr Cys Gln Ala Ala Asp Ser Ser Ser His Val 230 235 Leu Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 <210> 1993 <211> 247 <212> PRT <213> Homo sapiens <400> 1993 Gln Leu Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu 10 Thr Leu Ser Leu Thr Cys Ser Val Ser Gly Gly Ser Val Ser Ser Arg 20 25 Thr Gln Tyr Trp Gly Trp Ile Arg Leu Pro Pro Gly Lys Gly Leu Glu Trp Ile Ala Ser Leu Ser Phe Asp Gly Thr Thr Tyr Tyr Asn Pro Ser Leu Lys Ser Arg Val Thr Leu Ser Arg Asp Met Ser Lys Asn His Leu Ser Leu Asn Leu Asn Ser Val Thr Asp Ala Asp Thr Ala Val Tyr Tyr 85 90 Cys Ala Arg His Asp Val Tyr Gly Asp Leu Phe Asp Ser Trp Gly Arg 100 105 Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly

2372

120

Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser Val Leu Thr Gln Pro Pro

Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Leu Ser Cys Ser Gly 145 150 155 160

Ser Ser Ser Asn Ile Glu Tyr Asn Ser Val Ser Trp Tyr Gln His Leu 165 170 175

Pro Gly Ala Ala Pro Lys Leu Leu Ile Tyr Gly Asn Asn Gln Arg Pro  $180 \,$   $\,$   $185 \,$   $\,$   $\,$   $190 \,$ 

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala 195 200 205

Ser Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr 210 225 220

Cys Ala Thr Trp Asp Asp Arg Leu Leu Asn Pro Val Phe Gly Gly 225 230 235 240

Thr Lys Leu Thr Val Leu Gly 245

<210> 1994

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1994

Gln Leu Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln 1  $\phantom{\bigg|}$  15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Gly  $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$ 

Asp Tyr Tyr Trp Ser Trp Ile Arg Gln His Pro Gly Glu Gly Leu Glu 35 \$40\$

Trp Ile Gly Tyr Ile Tyr His Ser Gly Ser Thr Tyr Tyr Asn Pro Ser 50 60

Leu Lys Ser Arg Val Ser Met Ser Val Asp Thr Ser Lys Asn Gln Tyr 65 70 75 80

Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr

85 90 95

Cys Ala Arg Leu Arg Pro Asp Ala Asp Tyr Gly Asp Tyr Gly Phe Asp 100 105 110

Tyr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Ser Tyr Val

Leu Thr Gln Pro Pro Ser Ala Ser Ala Thr Pro Gly Gln Arg Val Thr 145 150 155 160

Ile Ser Cys Ser Gly Ser Arg Ser Asn Ile Gly Ser Asn Tyr Val Tyr  $_{165}$   $_{170}$   $_{175}$ 

Trp Tyr Gln Gln Phe Pro Gly Ala Ala Pro Lys Leu Leu Ile Tyr Arg 180 185 190

Ser Tyr Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys

Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Arg Ser Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Ala Thr Trp Asp Asp Arg Leu Arg Gly Leu 225 230 235

Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly 245 250

<210> 1995

<211> 248 <212> PRT

<213> Homo sapiens

<400> 1995 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu 1 5 10 15

Ser Leu Lys Ile Ser Cys Lys Ala Ser Gly Tyr Asn Phe Ala Asn Tyr

Trp Ile Ala Trp Val Arg Gln Thr Pro Gly Lys Gly Leu Gln Leu Met

- Gly Ile Ile Tyr Pro Gly Asp Ser Glu Thr Lys Tyr Ser Pro Ser Phe 50 60
- Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr 65 70 75 80
- Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Ser Ala Met Tyr Tyr Cys  $85 \hspace{0.5in} 90 \hspace{0.5in} 95$
- Ala Arg Thr Ser Glu Arg Gly Thr Tyr Arg Gln Trp Asp Phe Asp Asn 100 \$105\$
- Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Ser 115 120 125
- Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln Ser Val Leu Thr  $_{\rm 130}$   $_{\rm 135}$   $_{\rm 140}$
- Gln Pro Pro Ser Val Ser Val Ser Pro Gly Gln Thr Ala Ser Ile Thr 145 \$150\$ 150 \$155\$
- Cys Ser Gly Asp Lys Leu Gly Asn Lys Phe Ala Ser Trp Tyr Gln Gln 175
- Lys Pro Gly Gln Ser Pro Val Leu Val Ile Tyr Gln Asp Met Lys Arg 180 \$180\$
- Pro Ser Gly Ile Pro Glu Arg Phe Ser Gly Ser Asn Ser Gly Asn Thr 195 200 205
- Ala Thr Leu Thr Ile Thr Gly Ile Gln Ala Met Asp Glu Ala Asp Tyr  $210 \hspace{1cm} 225 \hspace{1cm} 220 \hspace{1cm} .$
- Tyr Cys Gln Ala Trp Asp Ser Ser Thr Ala Gly Tyr Val Phe Gly Thr 225 230 235 240
- Gly Thr Lys Leu Thr Val Leu Gly . 245

<sup>&</sup>lt;210> 1996

<sup>&</sup>lt;211> 246

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

	)> 19 Val		Leu .	Val 5	Gln	Ser	Gly	Ala	Glu 10	Val	Lys	Lys	Pro	Gly 15	Ala
Ser	Val	Lys	Val 20	Ser	Cys	Lys	Ala	Ser 25	Gly	Tyr	Ser	Phe	Thr 30	Asn	Tyr
Tyr	Met	His 35	Trp	Val	Arg	Gln	Ala 40	Pro	Gly	Gln	Gly	Leu 45	Glu	Trp	Met
Gly	Ile 50	Ile	Asn	Pro	Asn	Gly 55	Gly	Arg	Thr	Ser	His 60	Ala	Gln	Lys	Phe
Gln 65	Gly	Arg	Ile	Thr	Met 70	Thr	Lys	Asp	Thr	Ser 75	Thr	Ser	Met	Val	Tyr 80
Leu	Glu	Leu	Ser	Ser 85	Leu	Arg	Ala	Asp	Asp 90	Thr	Ala	Val	Tyr	Phe 95	CAa
Ala	Arg	Glu	Ala 100	Gly	Glu	Val	Ala	Ala 105	Ile	Asp	Tyr	Trp	Gly 110	Arg	Gly
Thr	Thr	Val 115	Thr	Val	Ser	Ser	Gly 120	Gly	Gly	Gly	Ser	Gly 125	Gly	Gly	Gly
Ser	Gly 130	Gly	Gly	Gly	Ser	Ala 135	Gln	Ser	Val	Val	Thr 140	Gln	Pro	Pro	Ser
Ala 145	Ser	Gly	Thr	Pro	Gly 150	Gln	Arg	Val	Thr	Ile 155	Ser	Cys	Ser	Gly	Ser 160
Arg	Ser	Asn	Ile	Ala 165	Ser	Asn	Tyr	Val	Asn 170	Trp	Tyr	Gln	Gln	Leu 175	Pro
Gly	Thr	Ala	Pro 180	Lys	Leu	Leu	Ile	Tyr 185	Lys	Asn	Asn	Leu	Arg 190	Pro	Ser
Gly	Val	Pro 195	Asp	Arg	Phe	ser	Gly 200	Ser	Lys	Ser	Gly	Thr 205	Ser	Ala	Ser
Leu		Ile	Ser	Gly	Leu		ser	Gly	Asp	Glu		Asp	Tyr	Tyr	Cys
	210					215					220				

Glu Thr Trp Asp Asp Arg Leu Asn Val Val Val Phe Gly Gly Gly Thr 225 230 230 235 240

Lys Leu Thr Val Leu Gly 245

<210> 1997 <211> 249 <212> PRT

<213> Homo sapiens

<400> 1997

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1  $$^{5}$$ 

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Thr Phe Ser Thr Tyr  $20 \\ 25 \\ 30$ 

Ala Ile Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$ \$40\$ \$45\$

Gly Thr Val Ile Pro Ser Ser Gly Ile Arg Lys Tyr Ala Gln Asn Phe 50 60

Glu Gly Arg Val Thr Ile Gly Ala Asp Asp Ser Pro Thr Thr Ala Tyr  $_{65}$   $\phantom{0}$  70  $\phantom{0}$  75  $\phantom{0}$  80

Met Glu Leu Ser Ser Leu Arg Ser Gly Asp Thr Ala Ile Phe Tyr Cys 85 90 95

Ala Arg Gly Lys Arg Tyr Ser Tyr Gly Trp Tyr Phe Asp Ile Trp Gly
100 105 110

Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
115 120 125

Gly Gly Ser Gly Gly Gly Ser Ala Gln Ala Val Leu Thr Gln Pro  $130\,$ 

Ser Ser Val Ser Gly Ala Pro Gly Gln Arg Val Ile Ile Ser Cys Thr 145 150 155 160

Gly Ser Ser Pro Asn Ile Gly Ala Gly Tyr Asp Val His Trp Tyr Gln
165 170 175

Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Gly Asn Asn Asn 180 185 190

Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr

Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln Ala Ala Asp Glu Ala Asp 210 \$215\$

Tyr Tyr Cys Gln Ser Tyr Asp Ser Ser Leu Arg Gly Tyr Val Phe Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Thr Gly Thr Lys Val Thr Val Leu Gly

<210> 1998

<211> 247 <212> PRT

<213> Homo sapiens

<400> 1998

Gln Leu Gln Leu Gln Glu Ser Asp Pro Gly Leu Val Lys Pro Ser Glu 1 5 10 15

Thr Leu Ser Leu Thr Cys Ser Gly Ser Gly Gly Ser Val Ser Ser Arg

Thr Gln Tyr Trp Gly Trp Ile Arg Leu Pro Pro Gly Lys Gly Leu Glu 35 40 45

Trp Ile Ala Ser Leu Ser Phe Asp Gly Thr Thr Tyr Tyr Asn Pro Ser

Phe Lys Ser Arg Val Thr Leu Ser Arg Asp Met Ser Lys Asn His Leu 65 70 75 80

Ser Leu Asn Leu Asn Ser Val Thr Asp Ala Asp Thr Ala Val Tyr Tyr \$85\$

Cys Ala Arg His Asp Val Tyr Gly Asp Leu Phe Asp Ser Trp Gly Arg 100 105 110

Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly 115 \$120\$ . \$125\$

Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser Val Leu Thr Gln Pro Pro 130 135

Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Leu Ser Cys Ser Gly 145 \$150\$

Ser Ser Ser Asn Ile Glu Tyr Asn Ser Val Ser Trp Tyr Gln His Leu  $_{165}$   $_{170}$   $_{175}$ 

 Pro Gly Ala Ala Pro Lys Leu Leu Ile Tyr Gly Asn Asn Gln Arg Pro 180 185 190

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala 195 200 205

Ser Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr 210 215 220

Cys Ala Thr Trp Asp Asp Arg Leu Leu Asn Pro Val Phe Gly Gly Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Thr Lys Leu Thr Val Leu Gly 245

<210> 1999

<211> 249

<212> PRT <213> Homo sapiens

<400> 1999

Ser Val Lys Ile Ser Cys Glu Ala Ser Gly Gly Thr Phe Ser Ser Tyr \$20\$

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$

Gly Thr Val Ile Pro Asp Ser Asn Ile Arg Lys Tyr Ala Gln Lys Phe  $50 \,$ 

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Pro Arg Thr Ala Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Met Glu Leu Ser Ser Leu Arg Ser Gly Asp Thr Ala Ile Phe Tyr Cys 85 90 95

Ala Arg Gly Lys Arg Tyr Ser Tyr Gly Trp Tyr Phe Asp Val Trp Gly

100 105 110

Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 120 125

- Gly Gly Ser Gly Gly Gly Ser Ala Gln Ala Val Leu Thr Gln Pro 130 135 140
- Ser Ser Val Ser Gly Ala Pro Gly Gln Arg Val Thr Ile Ser Cys Thr 145 \$150\$
- Gly Ser Ser Ser Asn Ile Gly Ala Gly Tyr Asp Val His Trp Phe Gln  $_{165}$   $_{170}$   $_{170}$
- Lys Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Gly Asn Thr Asn
- Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr
- Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln Ala Glu Asp Glu Ala Asp 210 215 220
- Tyr Tyr Cys Gln Ser Tyr Asp Arg Ser Leu Ser Gly Tyr Val Phe Gly 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$  240

Thr Gly Thr Lys Val Thr Val Leu Gly 245

- <210> 2000
- <211> 248
- <212> PRT <213> Homo sapiens
- <400> 2000
- Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu Val Lys Pro Gly Gly 1 5 10 15
- Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Ala 20 25 30
- Trp Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Pro Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr 75 70 Val Tyr Leu Gln Met Ser Ser Leu Gln Ser Glu Asp Thr Gly Val Tyr 85 90 95 Tyr Cys Thr Thr Leu His Cys Thr Gly Gly Ser Cys Gly Phe Trp Gly 100 105 110 Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Ser Gly Gly 115 . 120 125 Gly Gly Ser Gly Gly Gly Ser Ala Gln Ala Val Leu Thr Gln Pro 130 135 140 Ser Ser Ala Ser Ala Thr Pro Gly Gln Gly Val Thr Ile Ser Cys Ser 145 150 155 160 Gly Ser Ser Ser Asn Ile Gly Ser Asn Thr Val Asn Trp Tyr Gln Gln 165 170 Val Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Gly Asn Asn Gln Arg 185 Pro Ser Gly Val Pro Glu Arg Leu Ser Gly Ser Lys Ser Gly Thr Ser 195 . 200 Ala Ser Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr 210 215 220 Tyr Cys Ala Ala Trp Asp Asp Ser Leu Asn Gly Val Val Phe Gly Gly 235 Gly Thr Lys Leu Thr Val Leu Gly 245 <210> 2001 <211> 251 <212> PRT <213 > Homo sapiens <400> 2001 Glu Val Gln Leu Val Gln Ser Gly Thr Glu Val Lys Lys Pro Gly Ala

2381

10

Ser Met Lys Val Ser Cys Lys Ser Ser Gly Tyr Thr Phe Thr Asn Tyr  $20 \\ 25 \\ 30$ 

- Tyr Ile His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $_{\rm 35}$   $_{\rm 40}$
- Gly Ile Ile Asp Pro Thr Ser Gly Arg Thr Val Tyr Ala Gln Arg Phe 50~ 60~
- Lys Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr  $65 \\ 70 \\ 75 \\ 80$
- Met Glu Leu Thr Ser Leu Lys Ser Glu Asp Thr Ala Val Tyr Phe Cys 85 90 95
- Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly 115 \$120\$
- Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Ser Tyr Glu Leu Thr 130 135 140
- Cys Thr Gly Ser Ser Ser Asn Ile Gly Asp Gly Tyr Asp Val His Trp \$165\$ \$170\$ \$175\$
- Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Gly Asn 180 185 190
- Ala Asn Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Pro
  195 200 205
- Asp Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln Val Glu Asp Glu 210 215 220
- Ala Asp Tyr Phe Cys His Ser Tyr Asp Ser Asn Met Ser Gly Trp Ile 225 230 235 240
- Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly 245 250

<210> 2002 <211> 249 <212> PRT <213> Homo sapiens <400> 2002 Gln Leu Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gly 1 5 10 Thr Leu Ser Leu Thr Cvs Ala Val Ser Arg Glv Ser Thr Ser Ser Arg 25 20 3.0 Asn Trp Trp Ser Trp Val Arg Gln Phe Pro Glu Lys Gly Leu Glu Trp 35 40 45 Ile Glv Glu Ile Ser His Thr Gly Thr Thr Asn Tyr Asn Pro Ser Leu 50 55 60 Lvs Glv Arg Val Ser Ile Ser Ile Asp Asn Ser Lvs Asn Gln Phe Ser 70 75 65 Leu Lys Met Thr Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys 85 90 95 Ala Arg Arg Thr Pro Asp His Asn Gly Asp Ser Gly Pro Pro Asp Tyr 100 105 Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Ser 115 120 Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Ser Ser Glu Leu 130 135 Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile 145 150 155 160 Thr Cys Gln Gly Asp Ser Leu Arg Thr Tyr Tyr Ala Asn Trp Tyr Gln 165 170 175 Gln Lys Pro Gly Gln Ala Pro Val Val Val Ile Tyr Gly Lys Asn Asn 180 185

Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Tyr

200

Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp 210 215 220

Tyr Tyr Cys Asn Ser Gly Asp Arg Ser Gly Asn His Tyr Val Phe Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Thr Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 2003 <211> 237

<212> PRT <213> Homo sapiens

<213> Homo sapiens

<400> 2003 Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 20 25 30

Glu Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr  $_{65}$   $_{70}$   $_{75}$   $_{80}$ 

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Thr Thr Asp Tyr Trp Gly Lys Gly Thr Leu Val Thr Val  $100 \\ 100 \\ 105$ 

Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly 115 120 125

Ser Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Val 130 135 140

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser 145 150 155 160

190

Trp Leu Ala Trp Tyr Gln Gln Lys Pro Gly Arg Ala Pro Lys Val Leu 170 175 165 Ile Tvr Lvs Ala Ser Thr Leu Glu Ser Gly Val Pro Ser Arg Phe Ser

185 Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln 195 200 205

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro 210 215 220

Trp Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg

<210> 2004

<211> 245

<212> PRT <213> Homo sapiens

180

<400> 2004

Gln Val Gln Leu Gln Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr 20

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 3.5 40

Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85

Ala Arg Glu Ser Leu Thr Gly Gly Ala Phe Asp Ile Trp Gly Arg Ser

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly

Ser Glv Glv Glv Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val

130 135 140

Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser 145 150 155 160

Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro 165 170 175

Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser 180 185 190

Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser 195  $\phantom{\bigg|}200\phantom{\bigg|}$  205

Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys 210 215 220

Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Lys 225 230 235 240

Leu Thr Val Leu Gly 245

<210> 2005

<211> 237 <212> PRT

<213> Homo sapiens

<400> 2005

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 20 25 30

Glu Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr  $_{65}$  70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Thr Thr Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val 105 110 ser Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly 115 Ser Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Val 135 140 Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser 150 Trp Leu Ala Trp Tyr Gln Gln Lys Pro Gly Arg Ala Pro Lys Val Leu 165 170 Ile Tyr Lys Ala Ser Thr Leu Glu Ser Gly Val Pro Ser Arg Phe Ser 185 180 Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln 200 -195 Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro 210 215 Trp Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg 235 230 <210> 2006 <211> 237 <212> PRT <213> Homo sapiens <400> 2006 Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 10 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 25 . 30 Glu Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr Tyr Ala Asp Ser Val 50

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Thr Thr Asp Tyr Trp Gly Gln Gly Thr Met Val Thr Val 100  $$105\$ 

Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly 115 \$120\$

Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln 130 135

Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala 145 \$150\$

Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr 165 170 175

Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser 180 185 190

Gly Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu 195 200 205

Asp Glu Ala Asp Tyr Tyr Cys Asn Pro Arg Asp Ser Ser Gly Asn His 210 215

Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 225 230 235

<210> 2007

<211> 240 <212> PRT

<213> Homo sapiens

<400> 2007

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr

Glu Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40

Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr Tyr Ala Asp Ser Val 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 70

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys

Ala Arg Asp Thr Thr Asp Tyr Trp Gly Arg Gly Thr Met Val Thr Val 100 105 110

Ser Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly 115 120

Ser Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly 135

Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser 145 150

Asn Thr Val Asn Trp Tyr Gln Arg Leu Pro Gly Ala Ala Pro Gln Leu

Leu Ile Tyr Asn Asn Asp Gln Arg Pro Ser Gly Ile Pro Asp Arg Phe

Ser Gly Ser Lys Ser Gly Thr Ser Gly Ser Leu Val Ile Ser Gly Leu 195 200

Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ser Trp Asp Asp Ser 215

Leu Asn Gly Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 235 - 240 230

<210> 2008

<211> 241 <212> PRT

<213> Homo sapiens

<400> 2008

Gln Val Gln Leu Gln Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala

1 5 10 15 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr 20 25 Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr 7.0 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg Gly Ala Gly Ser Arg Tyr Phe Asp Leu Trp Gly Gln Ser Thr 2 105 Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val 135 Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg 145 Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg 185 Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly 195 200 Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys His Ser Arg Asp Ser 215 210

2390

235

Ser Gly Asn His Val Leu Phe Gly Gly Gly Thr Lys Leu Thr Val Leu

Gly

<210> 2009

<211> 243 <212> PRT

<213> Homo sapiens

<400> 2009

Gly Val Gln Leu Val Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr 20 25 30

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ 40 \ \ 45$ 

Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe  $_{\rm 50}$   $_{\rm 60}$ 

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Gly Gly Asp Arg Ala Phe Asp Ile Trp Gly Arg Ser Thr Leu  $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly 115 120 125

Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly 130 135

Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp 145 150 155 160

Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys \$165\$ \$170\$

Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val

Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr

195 200 205

Val Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser 210 215 220

Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Val Leu Glv

<210> 2010

<211> 236

<212> PRT

<213> Homo sapiens

<400> 2010 Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr \$20\$

Glu Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr Tyr Ala Asp Ser Val 50 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$ 90 95

Ala Arg Asp Thr Thr Asp Tyr Trp Gly Gln Gly Thr Met Val Thr Val

Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly I15 \$120\$

Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln 130 135

Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}$ 

Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Ser Val Leu Val fle Tyr 165 170 175

Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser

Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu 195 200 205

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 225 235

<210> 2011 <211> 244

<212> PRT

<213> Homo sapiens

<400> 2011

Gly Val Gln Leu Val Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr 20 25 30

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $\phantom{-}35\phantom{+}40\phantom{+}45\phantom{+}$ 

Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe 50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Gly Asn Ala Trp Gly Ala Phe Asp Ile Trp Gly Arg Ser Thr 100 105 110

Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser 115 120 125

Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser 130 140

Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser 145  $\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}155\phantom{\bigg|}$ 

Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly 165 170 175

Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly 180 \$180\$

Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu 195 200 205

Thr Val Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser 210 215 220

Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Lys Leu 225  $\phantom{\bigg|}230\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}$ 

Thr Val Leu Glv

<210> 2012 · <211> 243 <212> PRT

<213> Homo sapiens

<400> 2012

Gln Val Gln Leu Gln Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 15 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr
20 25 30

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ 40 \ \ 45$ 

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys \$85\$ 90 95

Ala Arg Gly Gly Asp Arg Ala Phe Asp Ile Trp Gly Arg Ser Thr Leu 100 \$105\$

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly 130 135 140

Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp 145 \$150\$

Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Glý Lys \$165\$

Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val

Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr \$195\$

Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser 210 \$215\$

Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Ala 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$  240

Val Leu Gly

<210> 2013

<211> 240 <212> PRT

<213> Homo sapiens

<400> 2013

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Arg

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr \$20\$

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

35 40 45

Ser Val Ile Asn Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$ 90 95

Ala Lys Val Lys Arg Tyr Tyr Phe Asp Tyr Trp Gly Arg Gly Thr Met

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly

Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala 130 140

Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser 145 150 155 160

Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu 165 170 175

Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe 180 185 190

Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser 210 215 220

Gly Asn His Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 225 230 235 240

<210> 2014

<211> 243

<212> PRT

<213> Homo sapiens

<400> 2014

Gln Val Asn Leu Arg Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr 70 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 Ala Arg Glu Leu Thr Gly Ala Asn Asp Ala Phe Asp Ile Trp Gly Arg 100 105 Ser Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly 120 115 Gly Ser Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val 135 140 Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tvr Tvr Ala Ser Tvp Tvr Gln Gln Lvs Pro Glv Gln Ala 165 170 Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro 185 Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asm His Val Val Phe Gly Gly Gly Thr Lys Leu Thr 230 235

Val Leu Gly